Medoc Mountain State Park
General Management Plan

GENERAL MANAGEMENT PLAN

FOR

MEDOC MOUNTAIN STATE PARK

Department of Environment, Health, and Natural Resources

Division of Parks and Recreation

Comprehensive Planning Program

August, 1995

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INTRODUCTION

Planning is an essential element of effective and efficient park administration and management. The North Carolina General Assembly acknowledged its importance by passing state parks system legislation that includes planning requirements.

The 1987 State Parks Act (G.S.114-44.7 through 114-44.14) stipulates that a State Parks System Plan be prepared. Such a plan was completed in December 1988. It evaluated the statewide significance of parks, identified duplications and deficiencies in the system, described the resources of the system, proposed solutions to problems, described anticipated trends, and recommended means and methods to accommodate trends.

The State Parks Act also requires each park to have an individual general management plan. The general management plans are required to:

> *...include a statement of purpose for the park based upon its relationship to the System Plan and its classification. An analysis of the major resources and facilities on hand to achieve those purposes shall be completed along with a statement of management direction. The general management plan shall be revised as necessary to comply with the System Plan and to achieve the purpose of the [State Parks Act].*

The general management plan (GMP) is to be a comprehensive five-year plan of management for a park unit. GMP's function to:

1. describe park resources and facilities;
2. state the purpose and importance of each park unit;
3. outline interpretive themes and propose locations for informational and interpretive facilities;
4. analyze park and recreation demands and trends in the park's service area;
5. summarize the primary laws guiding park operations;
6. identify internal and external threats to park natural and cultural resources, and propose appropriate responses;
7. identify and set priorities for capital improvement needs;
8. analyze visitor services and propose efficient, effective, and appropriate means of responding to visitor needs; and
9. review park operations and identify actions to support efficient and effective park administrative procedures.

The GMP for Medoc Mountain State Park, developed with public involvement, is intended to serve these purposes.

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I. DESCRIPTION OF

MEDOC MOUNTAIN STATE PARK

LOCATION AND ACCESS

Medoc Mountain State Park is located in western Halifax County, approximately 25 miles north of Rocky Mount and 18 miles southwest of Roanoke Rapids. The park can be reached via N.C. 561 and S.R. 1322.

Interstate 95 provides excellent north-south access to the park area, passing through Halifax County approximately 10 miles east of Medoc Mountain.

LAND BASE

Medoc Mountain State Park consists of 2,287 acres. The park is located along the fall line, a narrow zone that marks the boundary between hard, resistant rocks of the Piedmont and softer rocks of the Coastal Plain.

Medoc Mountain is a ridge that rises 325 feet above sea level and 170 feet above the surrounding terrain. Its height, although modest, does create a steep topography that is unusual for the northeastern Piedmont.

Medoc Mountain is significant to geologists because it is the site of a metallic mineral occurrence, molybdenum. The deposit is one of the largest molybdenum deposits known in the southeastern United States. Molybdenum is a metal valued as an alloy because of its high strength and low weight properties.

Two registered natural heritage areas exist at Medoc Mountain, the Medoc Mountain Registered Natural Heritage Area and the Beech Ravine Registered Natural Heritage Area. The Medoc Mountain Registered Natural Heritage Area contains a diverse combination of forest types segregated according to the unusually steep topography of the fall line. The majority of the natural area's forest was cut during the 1930s, with the exception of trees on the steepest slopes.

Medoc Mountain is not really a mountain, but rather a north-south granite ridge. The minerals feldspar, quartz and mica compose the granite. Medoc Mountain is an eastern-most example of a monadnock, an isolated residual hill that has not been reduced to the general lower level of the regional plain because of exceptional resistance to weathering and erosion. To the east of the ridge lies flat Coastal Plain terrain composed of marine-deposited sedimentary layers that cover the eastward-dipping crystalline basement rock.

The Medoc Mountain Registered Natural Heritage Area encompasses xeric pine-hardwood and hardwood forests on the slopes, with floodplain and lowland hardwood communities along the creeks at the base of the mountain. Its beech/mountain laurel communities are at the eastern limit of their range.

The Beech Ravine Registered Natural Heritage Area is situated on the steep west and northwest-facing slopes of Little Fishing Creek. Beech trees dominate the canopy except for a few scattered red oaks. A dense shrub understory of mountain laurel with herbaceous galax and trailing arbutus suggests an Upper Piedmont-Mountain habitat rather than the Piedmont-Coastal Plain location.

VISITOR FACILITIES

The park offers hiking, picnicking, family and group tent camping, canoeing and nature studies. Most of the park's facilities were constructed with the initial and only park development, which took place in the early 1980s.

Camping facilities include six family campsites, each with a table, grill and tent pad. There are three organized group sites. All campsites are served by a solar-heated washhouse offering showers and sanitary facilities.

One large picnic shelter with restrooms and tables and grills situated in a shady grove of trees comprises the picnic area. An open field is adjacent to the picnic area.

Approximately 12 miles of trails, including three miles of equestrian trail, are in the park. The Bluff Loop, Stream Loop and Discovery Loop are accessible from the picnic area, while the Summit Loop and Dam Site Loop are accessible from the park office.

Approximately one and a half miles of canoeing can be undertaken within the park on Little Fishing Creek. Steps to assist put-in and take-out of canoes have been constructed.

HISTORY OF THE PARK AREA

The mountain and its surrounding land area was once the property of Sidney Weller, a noted farmer and educator. Weller is given credit for developing the "American System" of grape culture and wine making, having developed a wine named Weller's Halifax. His property extended from the intersection of N.C. 48 and S.R. 1002 to Little Fishing Creek, with the vineyards being located along the ridge paralleling S.R. 1002.

Weller was recognized as a "book farmer" who experimented with crop rotation and fertilizing. He also organized and operated an academy for area children and assisted with the development of the first state fair in 1853. During his tenure of ownership, the peak

was supposedly given the name "Medoc" for a French province famous for its commercial grape vineyards.

After his death in 1854, his widow sold the vineyards to Charles and Mary Garrett, and the remaining land was subdivided among neighboring landowners. Through the late 19th and early 20th centuries, the Garretts operated the vineyard as well as a winery in Weldon. According to folklore, the Garretts used Weller's strains of grapes in the development of their own wine recipes.

Prohibition and a devastating fire brought an end to the Garrett winery. The vineyards were subdivided and the land converted to other crops. A large percentage of the land east and west of Medoc Mountain was put into cultivation, and through the years all evidence of the vineyards gradually disappeared.

During the 1930s, the mountain forest was cut for its commercial value, and a Boy Scout camp was developed on the peak. Several camp buildings were constructed, and the stream that meanders around the mountain was impounded for use as a swimming pond. A molybdenum deposit was identified at this time and was officially explored in 1943-1944 and again in the late 1960s. The 1943-44 exploration was conducted by the U.S. Bureau of Mines as part of its program to develop supplies of metals in short supply. The later explorations were conducted by large private mining companies. Apparently, no commercial ore bodies were identified during the explorations.

The rough terrain around Medoc Mountain has traditionally been used by local residents for hunting, horseback riding and hiking. The topography has prohibited farming on the steep slopes east of Little Fishing and Bear Swamp creeks, but the gently sloping terraces west of the mountain along S.R. 1322 have been extensively cultivated. Many of the old fields have been replanted in tightly spaced pine forests.

Medoc Mountain is also bounded by agricultural fields to the east along N.C. 48, many of which were originally part of the old Weller vineyards. They extend westward until the topography becomes too severe for farming.

S.R. 1002 at the intersection of N.C. 48 is said to be the general vicinity of the Weller vineyards. Many of the local residents settled along this state road, and although several of the farms have extensive land holdings, most are single-family homesite. One of these homes, the Matthews' House, is worthy of individual mention. It dates back to the late 18th century and remains in relatively good condition. Known locally as Ivy Hill, it consists of two equally interesting structures -- a late Georgian dwelling with a well-preserved traditional exterior and interior, and a robust Greek Revival side-hall addition. The house is currently on the National Register of Historic Places.

Although much of the area, including Medoc Mountain, has been cut

over for marketable timber, it is experiencing a regrowth of timber. Most of the area, especially the mountain itself, possesses some fine forest land and has regained its wilderness character.

On September 12, 1970, a Nash County area delegation made a proposal to the Board of Conservation and Development that the planned Tar River Reservoir be developed as a state park. The Division of State Parks investigated the site and determined that it did not qualify as a state park. The Board did recommend, however, that if a suitable site could be identified, a park should be located in this general region of the state.

In December of 1971, the Region L Council of Governments officially extended a request for a state park to be located within the region. At a subsequent meeting with the Regional L Council of Governments in February 1972, the Division of State Parks agreed to survey the region, which included Edgecombe, Halifax, Nash, Northampton and Wilson counties.

Only one of the numerous sites surveyed was judged to possess qualities desirable for a state park: Medoc Mountain/Fishing Creek. The Division's report, published May 12, 1972, recommended: (1) the acquisition of Medoc Mountain and 3,000 acres of surrounding land for a state park; (2) the designation of Fishing Creek as a state Natural and Scenic River; and (3) the establishment of a park corridor from Medoc Mountain to Fishing Creek via Little Fishing Creek.

The concept was supported by Region L and the State Parks Committee, and a show of good faith was extended by the Halifax Development Commission by its acquisition of a one-year option to purchase the standing timber on the Medoc Mountain tract. Thus, Union Camp was prevented from cutting the 147-acre tract for one year, until August 15, 1973. This action allowed State Parks the time necessary to develop an acquisition plan for the area. The first parcel was purchased in October of 1973, and by March of 1975, over 2,200 acres had been purchased.

While Medoc Mountain and surrounding land has been purchased and a state park established, the concept of a park with connecting protected stream corridors has not become a reality. Due to the threat of logging at Medoc Mountain, initial efforts concentrated on acquiring the mountain area. A decision was made to pursue Natural and Scenic River designation of Fishing Creek as a separate issue and subsequent park development step. Designation of Fishing Creek and establishment of a protected corridor along Little Fishing Creek from Medoc Mountain to Fishing Creek were delayed and forgotten amid other ongoing river and park priorities.

The concept of a state park and protected stream corridors is still viable if strong local support continues. In 1972, the Roanoke Rapids Area Chamber of Commerce president wrote the following to the Division of State Parks:

It was with great pleasure that we received the information from the staff of State Parks that the Medoc Mountain section of Halifax County, as well as portions of Fishing Creek, Little Fishing Creek and the Argo Gold Mine section would make a truly unique State Park, for not only our local citizens but for all the people of the State.

Thus with the unanimous approval of our Board of Directors, let me urge you on behalf of the Roanoke Rapids Area Chamber of Commerce and our citizens to establish a State Park within the above described area.

The city of Roanoke Rapids and the Region L Council of Governments -- representing the counties of Edgecombe, Halifax, Nash, Northampton and Wilson and the major municipalities therein -- also supported the broader concept of a park and protected river area.

II. PARK PURPOSES

MISSION STATEMENT OF THE NORTH CAROLINA STATE PARKS SYSTEM

The North Carolina state parks system exists for the enjoyment, education, health, and inspiration of all our citizens and visitors. The mission of the state parks system is to conserve and protect representative examples of the natural beauty, ecological features and recreation resources of statewide significance; to provide outdoor recreation opportunities in a safe and healthy environment; and to provide environmental education opportunities that promote stewardship of the state's natural heritage.

MEDOC MOUNTAIN PARK PURPOSE STATEMENT

Local interest in having a state park located in Edgecombe, Halifax, Nash, Northampton, and Wilson counties led to the Division of Parks and Recreation conducting an extensive survey to identify sites possessing qualities desirable for a state park. The survey identified one suitable area, Medoc Mountain/Fishing Creek, because of its unique mixture of natural, scenic and recreational resources and its potential for interpretation and education.

The survey report -- presented to the State Parks Committee of the Board of Conservation and Development in May of 1972 -- recommended that (1) Medoc Mountain and 3,000 acres of surrounding land be acquired; (2) Fishing Creek be designated as a N.C. Natural and Scenic River; and (3) a park corridor be established from Medoc Mountain to Fishing Creek via Little Fishing Creek. The recommendations were supported locally and by the State Parks Committee. The Halifax Development Commission secured an option to purchase the standing timber on Medoc Mountain, thus preventing its being cut. State land acquisition for the park began in October 1973.

Medoc Mountain is a monadnock that rises 325 feet above sea level and 170 feet above the surrounding terrain, thus creating a steep topography unusual for the northeastern Piedmont. The mountain, which is actually a weather- and erosion-resistant ridge, is one of the easternmost formations of crystalline rock in the state. The Medoc Mountain area is particularly significant geologically because it contains one of the largest molybdenum deposits known in the southeastern United States. The metallic mineral molybdenum, valued as an alloy because of its high strength and low weight, occurs in some quartz veins and portions of granite as the mineral molybdenite. Pyrite, or "fool's gold," is often found with molybdenite.

The park's significant scenic resources include exposed rock outcrops and steep bluffs rising up to 50 feet above Little Fishing Creek. The creek -- with its gentle riffles -- twists, turns, and flows through a mixture of bottomland hardwoods, annuals, and other herbaceous plants and wildflowers. An expansive view over the diverse forest types of the area is possible from the top of the mountain.

Medoc Mountain State Park offers various outdoor recreational opportunities compatible with the protection of the park's natural resources. The park's location, less than 10 miles from I-95, enhances regional access and makes it a convenient camping and stop-over destination for long-distance travellers. Opportunities exist for group and individual visitors to enjoy activities such as hiking, nature study, fishing, picnicking, canoeing, and camping.

The park contains a diverse combination of forest types segregated according to the unusually steep topography for the fall line. The Medoc Mountain Registered Natural Heritage Area encompasses xeric pine-hardwood and hardwood forests on the slopes, with floodplain and lowland hardwood communities along the creeks. The Beech Ravine Registered Natural Heritage Area lies on the steep west-northwest facing slopes of Little Fishing Creek. Beech trees dominate the canopy except for a few scattered red oaks. The natural areas have good examples of range extensions for the chestnut oak/mountain laurel and beech/mountain laurel communities. The Neuse River Waterdog (Necturus lewisi), a special-concern amphibian endemic to North Carolina, lives in Little Fishing Creek.

Medoc Mountain State Park exists so that its valuable geologic, scenic, recreational, and biologic values can be protected. The Division is charged with preserving those values and providing park experiences that promote pride in and understanding of North Carolina's natural heritage.

III. SUMMARY OF INTERPRETIVE THEMES

The 1987 State Parks Act defines the purposes of the state parks system. It establishes that:

> *The State of North Carolina offers unique archaeologic, geologic, biologic, scenic and recreational resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendents.*

It further provides that:

> *Park lands are to be used by the people of this State and their visitors in order to promote understanding of and pride in the natural heritage of this State.*

One of the best methods of meeting these purposes is through environmental education. The Department of Environment, Health, and Natural Resources has adopted the following definition of environmental education:

> *Environmental education is a process that increases awareness, knowledge, and understanding of natural systems -- the interdependence of living things, the impact of human activities -- and results in informed decisions, responsible behavior, and constructive action.*

Medoc Mountain State Park is well suited to environmental education. The park has three primary interpretive themes and several secondary themes. The primary themes, in order of priority, are geology, ecology of Little Fishing Creek, and park history.

PRIMARY INTERPRETIVE THEMES

GEOLOGY

One of the primary interpretive themes is the geology of Medoc Mountain, focusing on how the mountain was formed and its geologic composition. Emphasis is placed on the unusual rocks and minerals, such as molybdenum and pyrite.

ECOLOGY OF LITTLE FISHING CREEK

The ecology of Little Fishing Creek, focusing on the biological diversity, aquatic habitats, and water quality, is another primary interpretive theme at Medoc Mountain State Park.

PARK HISTORY

The third primary interpretive theme is the park's history, focusing on the area's settlement, the winery, and land-use history.

SECONDARY INTERPRETIVE THEMES

Medoc Mountain has a variety of secondary themes, including:

1. plant and animal communities
2. unique plant diversity
3. birds
4. entomology
5. astronomy
6. conservation ethic
7. park system history

IV. PARK AND RECREATION

DEMAND AND TRENDS

ANNUAL VISITATION TRENDS

Medoc Mountain State Park's annual visitation grew at an average compounded rate of 12.33 percent from 1977 through 1991. As Figure IV-1 shows, the visitation growth, though impressive, has been irregular on a year-to-year basis. Visitation has grown from 9,204 in 1977 to 46,896 in 1991.

The major facilities at the park -- the campground and bathhouse, utilities, and the picnic area with the shelter and restrooms -- were available for public use for the first time in 1983. The opening of these facilities was the primary factor resulting in visitation jumping from 8,533 in 1982 to 18,382 a year later.

Park visitation also jumped substantially in 1988. New park staff began promoting the park locally, which resulted in increased visitation. A new traffic counter was also installed, and more accurate vehicle counts were probably recorded as a result.

Visitation since 1988 has been relatively flat, hovering around 50,000 visits annually.

MONTHLY VISITATION TRENDS

The park receives its heaviest visitation from May through October. During this six-month period, the park receives 70.6 percent of its annual visitation. This pattern suggests that seasonal staff should be used as much as possible during this period of higher visitation.

Figure IV-2 shows the monthly attendance pattern averaged for the three-year period from 1989 through 1991. Monthly visitation picks up with the onset of warmer weather in the spring. It then remains fairly constant at about 6,000 visits monthly through the summer before starting to drop in September. With the display of brilliant fall foliage, visitation takes a concomitant jump. It then drops to dramatically lower levels, approximately 2,000 visits, during the cold weather months.

As is generally true of state park units, visitation totals have not always been calculated the same way over the years. Medoc Mountain park staff currently use a person-per-car figure of three for week days and four for weekends and holidays from April through October. From March through November, two people per car for week days and four on weekends and holidays is used. For the winter months of December, January and February, a figure of two during

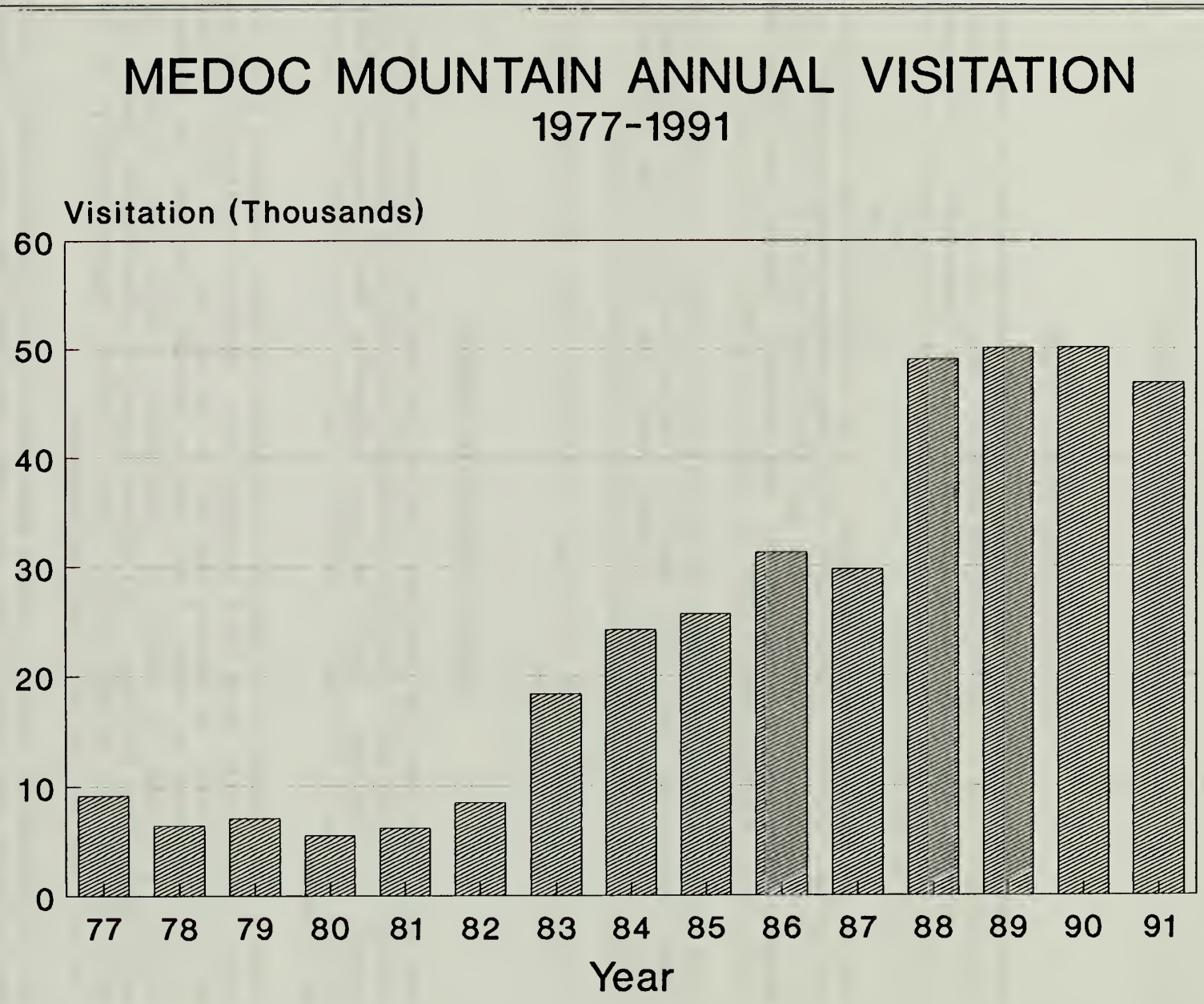


Figure IV-1. MEMO Annual Visitation

MEDOC MOUNTAIN MONTHLY VISITATION
1989 - 1991

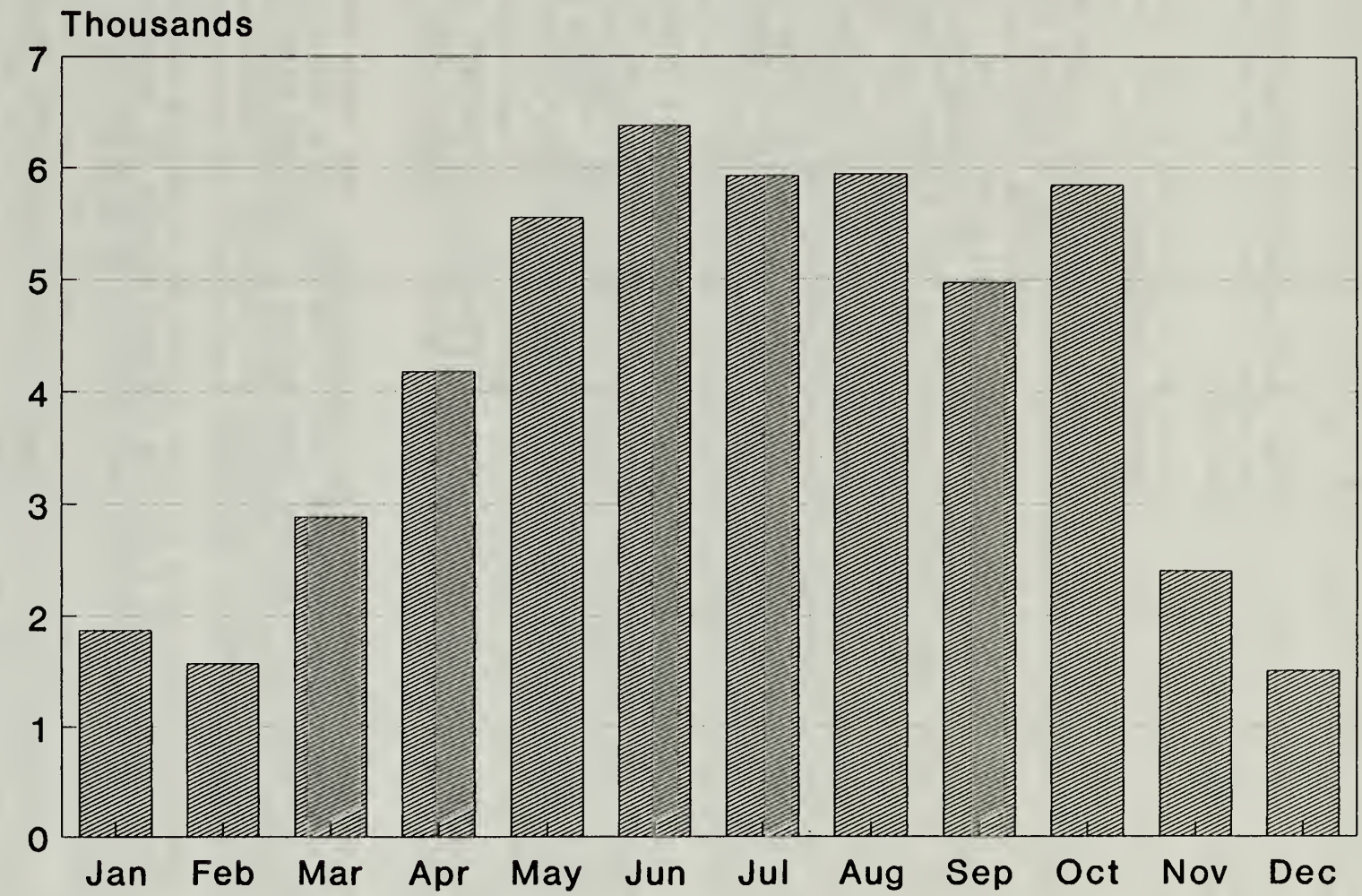


Figure IV-2. Average Monthly Visitation

the week and three on weekends and holidays is used. These figures roughly correspond with the Park Areas Recreation Visitors Survey person-per-car figure of 3.05.

One traffic counter records the number of vehicles entering the park. It is located on the side of the park where the campground, open space and picnic area are.

VISITOR INFORMATION

In 1987 the U.S.D.A. Forest Service was contracted by the Department to conduct a Public Areas Recreation Visitors Survey (PARVS) of the North Carolina state parks system visitors in order to identify their socio-economic characteristics and economic contribution to the state's economy. While Medoc Mountain was not one of the eight parks involved in the survey, some information concerning state park visitors in general was learned.

Why do people visit state park units? The convenient location was cited by 31 percent of the respondents; 25 percent thought other areas were too crowded; 21 percent liked the good facilities; 8 percent wanted to try a new area; 7 percent enjoyed the scenic beauty; and 6 percent came to see the attraction.

A good percentage of park visitors come from within a 30-mile radius (37 percent), while 17 percent come from 30 to 60 miles away. Park visitors surveyed indicated that the parks served as their sole destination 86 percent of the time. While most visitors come from nearby, the average one-way distance travelled was 139 miles.

Seventy-eight percent of those surveyed indicated that they were return visitors. The average number of return trips per year was six.

Sixty-one percent of visitors statewide came with family members, 16 percent with friends, and 7 percent with family and friends. Ten percent of visitors came alone. Visitors also came in small numbers in organized groups and multiple families. The average group size surveyed was 3.59.

PARVS data indicates that 16.8 percent of groups surveyed used more than one car, and that the average number of persons per car was 3.05. This persons-per-car figure approximates that used at Medoc Mountain.

The average age of the park visitor was 38.24 years. The age distribution was as follows:

Percent of Visitors by Age Group

Under 6	6-12	13-18	19-25	26-35	36-45	46-55	56-65	Over 65
6.7	11.6	10.6	12.5	20.1	16.9	0.9	7.3	4.4

Because the PARVS information shown above was gathered at eight park sites, not including Medoc Mountain State Park, it cannot be considered a valid study of Medoc Mountain visitation. It is useful, however, in providing a general assessment of the state park system's visitation as well as a general indication of likely visitation at Medoc Mountain.

PARVS data indicate that approximately 25 percent of state park visitation comes from out of state. PARVS data also indicate that out-of-state visitors averaged 4.1 trips per year to North Carolina state parks. Medoc Mountain State Park's out-of-state visitation, because of the park's location approximately 10 miles from I-95, a major north-south interstate highway, and only about 30 miles from the North Carolina-Virginia state line, may well be higher. Park staff estimate that half of the park's campers are from out of state. This figure might well be even higher if a park exit sign were placed on I-95 or other promotions undertaken to draw out-of-state visitors.

Since over 18 percent of state parks system visitors are under the age of 13, demand exists for children's programs and facilities. Facilities such as an expanded campground and picnic area, a children's play area, and a swimming area would help to meet such needs. Approximately 12 percent of visitors are 56 and older. This older segment of the general population will be increasing, and as it does, demand for improved quality, accessibility, and safety should increase.

POPULATION TRENDS

The primary service area of Medoc Mountain State Park is identified as Halifax County, in which Medoc Mountain is located, and the surrounding counties of Edgecombe, Franklin, Nash, Northampton, and Warren.

The total 1990 population of Halifax, Edgecombe, Franklin, Nash, Northampton and Warren counties was 263,228, 3.97 percent of the state's population. The area's population is projected to increase to 281,883 by the year 2000, up 7.1 percent for the decade. This projected rate of growth is slightly faster than the 6.7 percent growth rate experienced during the 1980s (Figure IV-3). Because the region's population is projected to grow at approximately the same rate as it did during the 1980s, no changing impact on Medoc Mountain State Park from population growth is expected.

POPULATION TRENDS 1980- 2000
MEDOC MOUNTAIN AREA

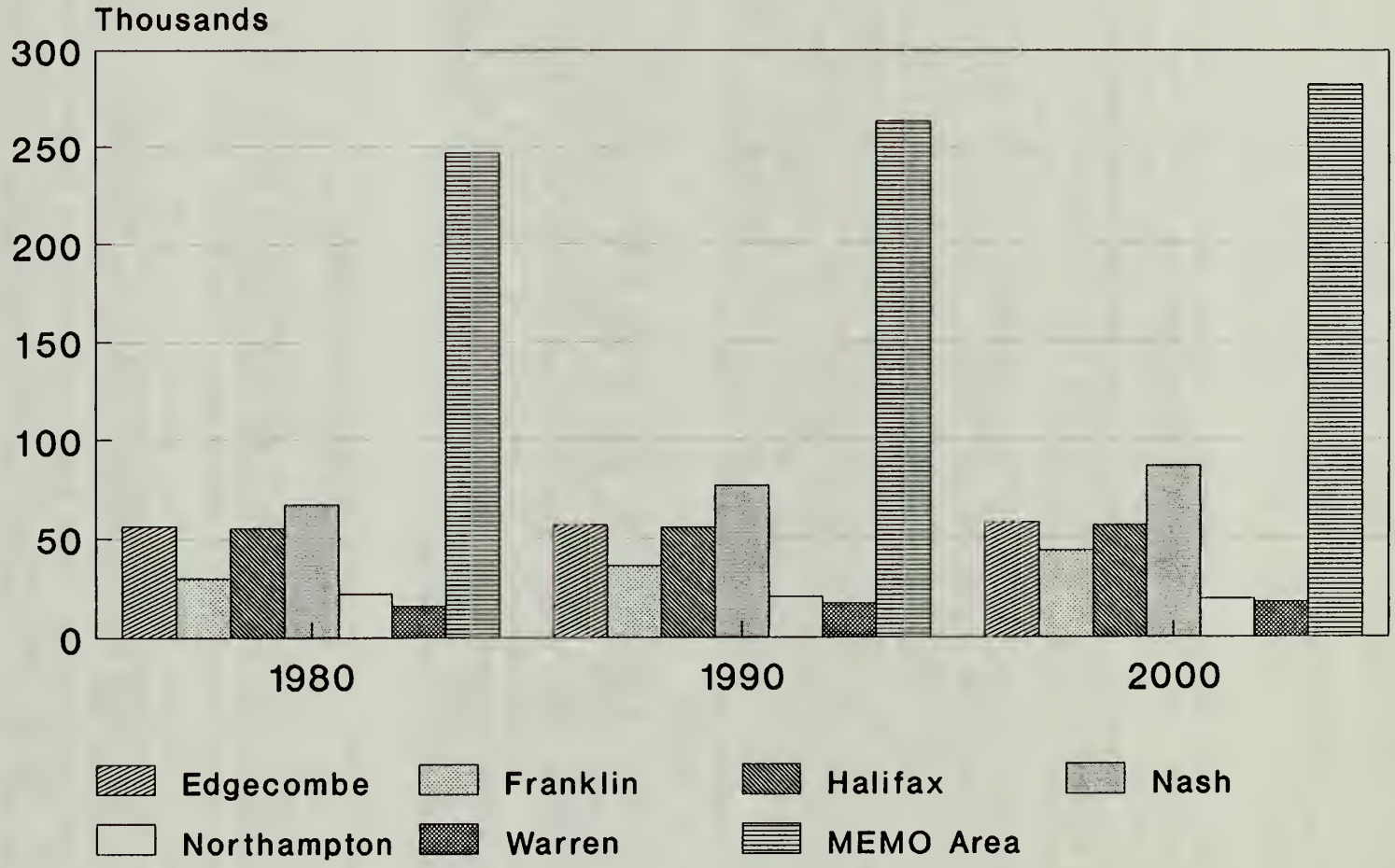


Figure IV- 3.MEMO Area Population Trends

The rate of population growth of the preponderantly rural region has been and is projected to be slower than that experienced by the state as a whole. During the 1980s, the state's population grew 12.7 percent versus 6.7 percent for the region. While the rate of growth for the state is projected to slow to 9.53 percent during the 1990s, due primarily to a slowing of in-migration, the state's population will continue to grow faster than that of the Medoc Mountain region, projected at 7.1 percent.

Increases in visitation at Medoc Mountain State Park have far outpaced the population growth of the area. This has resulted primarily from an increased demand for outdoor recreation in general, an increased demand in the Medoc Mountain area, increasing public awareness of the park, completion of initial facility development at the park, and increased park visitation from out-of-state visitors traveling along I-95.

From 1977 through 1991, the average growth in park visitation for one year (12.33 percent) exceeded the 10-year growth rate (6.7 percent) experienced during the 1980s. Park visitation growth during the 1980s was 806 percent, 65 times the population growth of the area.

The trend of park visitation increasing at a far greater pace than the Medoc Mountain area's population growth is expected to continue during the 1990s. With additional facility development recommended in this general management plan, visitation would accelerate.

According to the Office of State Budget and Management, outside of catastrophic events such as a depression or outbreak of a rapidly spreading incapacitating disease, the single most influential force affecting the need for state services is the growth and shifts in population. Continued population growth in the Medoc Mountain area and the trend of increasing annual visitation at the park indicate that annual visitation growth at Medoc Mountain State Park will continue.

Population shifts in various age segments will also take place. Over the past 10 years, the number of women in their prime childbearing years has declined with the aging of the 1940's baby boomers, and the result has been a decline in the number of births. The number of women in their late teens to middle thirties is projected to change little over the next 20 years. Assuming a stable childbearing rate, the number of children in the newborn to four-year-old category will remain stable.

Public-school-age population (5 to 17) has declined significantly during the past 10 years. It has now reached a plateau that is expected to continue. The college age (18 to 24) population has declined in recent years and is likely to continue its small decline before stabilizing at the end of the century. The percentage of the 18-to-34 population started to decline in 1990.

In contrast, the growth in the middle-age and elderly population

during the next 20 years is a virtual certainly, thanks to the baby boom of the 1940's. The fastest-growing age segment over the next two decades will be the over-85 segment, followed by the 75-to-84 and then the 65-to-74 segments.

Over the past 10 years, the elderly population has become an increasingly vital political force. For the short-term future, it is anticipated that the growing elderly population will confine its demands primarily to health, nursing homes, activities of daily living, and protective services.

While shifts in population age groups are particularly significant in school and some social programs, it is not thought that these age-group changes that will be taking place will have a significant effect on Medoc Mountain State Park over the next five to 10 years. Over a longer period of time, as the elderly population grows, demand for improved services and facilities catering to this age group can be expected.

POPULATION DENSITY

The Medoc Mountain State Park primary service area is one of the least densely populated regions in North Carolina. The region contains 3.97 percent of the state's population and 6.624 percent of its land area. Edgecombe, Franklin, Halifax, Northampton, and Warren counties all have population densities below the state's average of 136 people per square mile. Only Nash County, with 142 people per square mile, exceeds the state average (Figure IV-4.)

OUTDOOR RECREATION PARTICIPATION IN NORTH CAROLINA

The five most popular outdoor recreation activities in North Carolina are walking for pleasure, driving for pleasure, viewing scenery, beach activities, and visiting historical sites. Three out of every four households participated in walking for pleasure at least once in the past 12 months (Table IV-1). In addition to the five most popular activities, over fifty percent of the households responding to a 1989 survey participated at least once in the following activities: swimming (in lakes, rivers, or oceans), visiting natural areas, picnicking, attending sports events, visiting zoos, and freshwater fishing.

The North Carolina Outdoor Recreation Participation Survey was mailed to 3,100 randomly selected residents in the spring of 1989. Forty-five percent, or 1,399 people, returned completed surveys. Each person receiving the survey was asked to estimate the number of times the members of his household had participated in each of 43 activities. The survey results provide good insight into the current participation of North Carolinians in a wide range of outdoor recreation activities.

1990 POPULATION DENSITY
MEDOC MOUNTAIN AREA

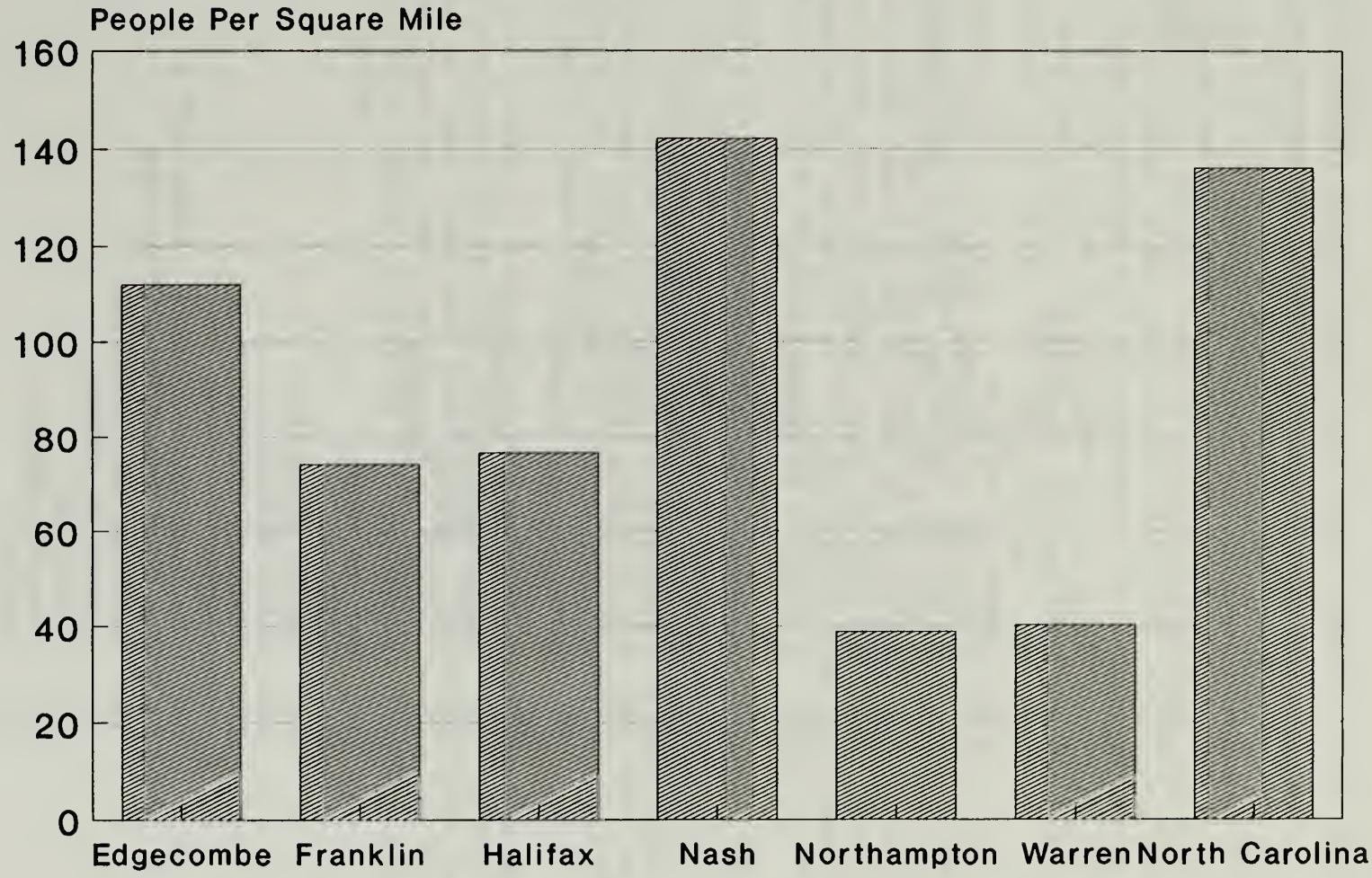


Figure IV-4.MEMO Area Population Density

Table IV-1. Outdoor recreation activities ranked by popularity.

Rank	Activity	Percentage of Households Participating
1.	Walking for Pleasure	75%
2.	Driving for Pleasure	72
3.	Viewing Scenery	71
4.	Beach Activities	69
5.	Visiting Historical Sites	62
6.	Swimming (in Lakes, Rivers, and Oceans)	54
7.	Visiting Natural Areas	53
8.	Picnicking	52
9.	Attending Sports Events	52
10.	Visiting Zoos	51
11.	Fishing - Freshwater	50
12.	Use of Open Areas	41
13.	Swimming (in Pools)	40
14.	Fishing - Saltwater	38
15.	Attending Outdoor Cultural Events	35
16.	Bicycling for Pleasure	32
17.	Other Winter Sports	31
18.	Camping, Tent or Vehicle	29
19.	Softball and Baseball	28
20.	Hunting	28
21.	Use of Play Equipment	28
22.	Power Boating	26
23.	Trail Hiking	26
24.	Jogging or Running	24
25.	Basketball	24
26.	Nature Study	22
27.	Golf	22
28.	Target Shooting	20
29.	Water Skiing	19
30.	Camping, Primitive	14
31.	Tennis	14
32.	Use Motorcycles, Dirt Bikes, ATV's	13
33.	Use Four Wheel Drive Vehicles	13
34.	Canoeing and Kayaking	13
35.	Horseback Riding	12
36.	Volleyball	12
37.	Downhill Skiing	12
38.	Football	11
39.	Soccer	7
40.	Sailboating	7
41.	Skateboarding	6
42.	Cross Country Skiing	2
43.	Windsurfing	1

PRIORITIES OF PUBLIC OUTDOOR RECREATION FUNDING

The North Carolina Outdoor Recreation Survey asked residents a series of questions in order to identify and rank future demand for public outdoor recreation. Future demand was determined by asking them which activities they would have tried more often had adequate facilities been available. Respondents were then asked to rank these activities in order of importance. A scoring system was used assigning each activity a rating of high, moderate or low future demand based on the survey results.

In the second part of the analysis, the respondents' level of support for publicly funded outdoor recreation activities was determined by asking them to identify and rank those activities to which government should give highest priority when spending public money. The same scoring system used to analyze unmet demand was then applied to the survey results, with each activity receiving a high, moderate or low rating in public support for public funding.

In the final part of the needs analysis, the two ratings for each activity were combined to produce a score of one to nine that reflected both future demand and public funding priorities. The activities that ranked high in both future demand and support for public funding received the highest priority in the needs assessment. Support for public funding was given higher priority than expressed demand (Table IV-2).

Based on this analysis, many of the activities rated as the highest priorities are activities that are currently or could potentially be provided at Medoc Mountain State Park. The activities include walking for pleasure, tent camping, picnicking, freshwater fishing, visiting natural areas, bicycling for pleasure, viewing scenery, and trail hiking.

Table IV-2. Priorities for Future Outdoor Recreation Activities

Activity	Code	Future Demand	Support for Public Funding
Walking for Pleasure	1	High	High
Camping, Tent or Vehicle	1	High	High
Picnicking	1	High	High
Beach Activities	1	High	High
Fishing - Freshwater	1	High	High
Attend Outdoor Cultural Events	1	High	High
Visiting Natural Areas	2	High	Moderate
Use of Play Equipment	2	High	Moderate
Visiting Zoos	2	High	Moderate
Visiting Historical Sites	2	High	Moderate
Bicycling for Pleasure	3	Moderate	High
Swimming (in Pools)	3	Moderate	High
Viewing Scenery	4	Moderate	Moderate
Hunting	4	Moderate	Moderate
Trail Hiking	4	Moderate	Moderate
Use of Open Areas	4	Moderate	Moderate
Target Shooting	4	Moderate	Moderate
Swimming (Lakes, Rivers, Ocean)	4	Moderate	Moderate
Fishing - Saltwater	4	Moderate	Moderate

AREA OUTDOOR RECREATION OPPORTUNITIES

Medoc Mountain State Park is an important outdoor recreation resource. It offers outdoor recreation opportunities in a natural setting that are not generally found in the counties surrounding the park. It is the only state park in its area of the state, and its establishment came about in large measure from local recognition of this fact.

No state parks are located within a 50-mile radius of Medoc Mountain. The closest state park units are two state recreation areas, Kerr Lake in Vance County and Falls Lake in Wake County. Kerr Lake is approximately a 35-mile drive away, and Falls Lake is about a 55-mile drive. Both of these recreation areas are located at large reservoirs and have a water-oriented focus.

The small population base in the area and its rural nature are not conducive to the establishment of park and recreation departments. Edgecombe, Franklin, Halifax, Nash and Northampton counties do not operate park and recreation departments. Warren County established its department in the late 1980s. Only five municipalities in the

six-county area -- Nashville, Rocky Mount, Tarboro, Roanoke Rapids, and Scotland Neck -- have park and recreation departments. The closest of these municipalities, Roanoke Rapids, is approximately a 20-mile drive from Medoc Mountain.

Because of the relative lack of outdoor recreation areas in the six counties, Medoc Mountain has tended to be used by local residents as a day-use area. There is particularly heavy use of the picnic area, picnic shelter and open space area by local families and groups.

The Medoc Mountain area falls short of Statewide Comprehensive Outdoor Recreation Plan (SCORP) standards for outdoor recreation areas. The shortage is true of state park type areas as well as what are generally thought of as state park facilities.

Table IV-3 shows the need for various types of outdoor recreation facilities in Edgecombe, Franklin, Halifax, Nash, Northampton, and Warren counties, based upon SCORP standards. The table also shows the existing supply of these facilities, as well as the percentage of sufficiency. Most of the supply of picnic tables (156 tables) is in Warren County.

Table IV-3. Medoc Mountain Area Facility Demand and Supply

	Camp Sites	Picnic Tables	Playgrounds/ Tot Lots	Miles of Trail
Need	1602	533	266	266
Supply	118	355	41	29
% Sufficiency	7.4	66.6%	15.4%	10.9%

Table IV-4 shows the need for various types of outdoor recreation areas in Edgecombe, Franklin, Halifax, Nash, Northampton and Warren counties, based upon SCORP standards. The table also shows the existing supply of these types of outdoor recreation areas as well as the percentage sufficiency of the six-county area. State park lands fall into the regional park acreage category, for which the standard is 20 acres per 1,000 population.

Table IV-4. Medoc Mountain Area Park Acreage Demand and Supply

	Type of Park Acreage			
	Neighborhood	Community	District	Regional
Need	425	2141	2676	5356
Supply	176	333	1594	2534
Sufficiency	41.4%	15.6	59.6	47.3

The above figures include all the public park and recreation areas and facilities in the Edgecombe, Franklin, Halifax, Nash, Northampton, and Warren county area. Private campgrounds are also included.

Until a few years ago, the Wildlife Resources Commission operated state game lands in Warren, Halifax, Northampton and Franklin counties. These had consisted of approximately 56 areas totalling 19,991 acres. These areas, however, are no longer leased for game land purposes.

No state or national parks are located in Virginia that fall within a 50-mile radius of Medoc Mountain. The nearest Virginia state park is Occoneechee State Park, located approximately 80 miles from Medoc Mountain.

Based upon SCORP standards, there is a clear need for additional park and recreation areas and facilities in the Medoc Mountain area. These data strongly support additional land acquisition and facility development at Medoc Mountain. The standards are based upon the area's population. Land acquisition and facility development at Medoc Mountain can also be further supported by the potential out-of-state visitors passing nearby on Interstate 95.

INTERPRETATION AND EDUCATION TRENDS

Medoc Mountain's interpretation and education programming currently reaches approximately one in six park visitors. The number of participants for the years 1988 through 1991 are as follows:

	Environmental Education	All I&E Programming
1988	0	5495
1989	890	7065
1990	1105	7480
1991	150	8382

V. SUMMARY OF LAWS

GUIDING PARK MANAGEMENT

There are many federal and state statutes, state and federal executive orders, and administrative rules and policies that govern the operation of the state parks system. A thorough listing and discussion of these will be available in the Systemwide Policies Manual, which is under development.

This chapter includes a brief discussion of the primary legal basis for the existence and operation of the state parks system.

NORTH CAROLINA CONSTITUTION

Article XIV, Section 5, of the North Carolina Constitution sets overall policy by broadly defining the conservation and protection of natural resources and the acquisition of such resources as a proper function of government. The amendment reads in part as follows:

> *It shall be the policy of this State to conserve and protect its lands and waters for the benefit of all its citizenry, and to this end it shall be a proper function of the State of North Carolina and its political subdivision to acquire and preserve park, recreation, and scenic areas, to control and limit the pollution of our air and water, to control excessive noise, and in every other appropriate way to preserve as a part of the common heritage of this state its forests, wetlands, estuaries, beaches, historical sites, open land, and places of beauty.*

STATE LAWS

STATE PARKS ACT

The State Parks Act (G.S. 113-44.7 through 113-44.14) sets forth a mission statement for the state parks system. It states that the system functions to preserve and manage representative examples of significant biologic, geologic, scenic, archaeologic, and recreational resources, and that park lands are to be used by the people of the state and their visitors and descendants in order to promote understanding of and pride in the state's natural heritage.

The State Parks Act also calls for development and periodic revisions of a System Plan to achieve the mission and purpose of the state parks system in a reasonable, timely, and cost-efficient manner. The Act describes System Plan components and requires that public participation be a component of plan development and

revisions.

The State Parks Act also calls for the classification of park resources and development of general management plans (GMPs) for each park. GMPs are to include a statement of park purpose, an analysis of major resources and facilities, and a statement of management direction.

POWERS AND DUTIES OF THE DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES

This act authorizes the Department to make investigations of the resources of the state and to take such measures as it may deem best suited to promote the conservation and development of such resources. The Act also authorizes the Department to care for state forests and parks and other recreational areas now owned, or to be acquired by the state. (G.S. 113-8)

STATE NATURE AND HISTORIC PRESERVE DEDICATION ACT

The State Nature and Historic Preserve Dedication Act (G.S.143-260.6) was authorized by Article 14, Section 5, of the North Carolina Constitution. It seeks to ensure that lands and waters acquired and preserved for park, recreational and scenic areas for the purpose of controlling and limiting the pollution of air and water, controlling excessive noise, and in every other appropriate way preserving as a part of the common heritage of the state, continue to be used for those purposes. The State Nature and Historic Preserve therefore provides a strong legal tool for protecting lands from incompatible uses.

The addition and removal of lands to and from the State Nature and Historic Preserve require a law enacted by a vote of three-fifths of the members of each house of the General Assembly.

A total of 2,287 acres, all of Medoc Mountain State Park, is in the State Nature and Historic Preserve.

NORTH CAROLINA ENVIRONMENTAL POLICY ACT OF 1971

Recognizing the profound influence that man's activity has on the natural environment, the General Assembly passed the Environmental Policy Act "*to assure that an environment of high quality will be maintained for the health and well-being of all...*"

The Act declares that:

> *It shall be the continuing policy of the State of North Carolina to conserve and protect its natural resources and to create and maintain conditions under which man and nature can exist in productive harmony. Further, it shall be the policy of the State to seek, for all its*

> *citizens safe, healthful, productive, and aesthetically pleasing surroundings; to attain the widest possible range of beneficial uses of the environment without degradation, risk to health or safety; and to preserve the important historic and cultural elements of our common inheritance. (G.S. 113A-3)*

While there are other General Statutes that concern the state parks system and the environment, the above-described statutes, along with Article XIV, Section 5, of the North Carolina Constitution, largely define the purposes of the state parks system and serve to guide the operation of state park system units.

MEDOC MOUNTAIN MOUNTAIN MASTER PLAN

A master plan for Medoc Mountain State Park was completed in 1975. The plan is to serve as a guide for development and management of park resources. It includes an analysis of cultural and natural resources as well as site analysis and development recommendations.

The master plan was developed with the primary objective of providing a development plan and program compatible with the nature of the site. The plan sought to efficiently provide for administrative services and operations by unifying them physically. The plan also called for a review of the impact of site development and visitor use after each development phase, thus ensuring long-range protection of the natural resources.

The master plan still serves to guide overall park development. During the general management plan process, the existing master plan was reviewed to determine if master plan proposals are still valid or if modifications are needed. At Medoc Mountain, GMP evaluation determined that minor changes to the master plan were needed. These changes are detailed in Chapter VII.

VI. NATURAL AND CULTURAL RESOURCE MANAGEMENT

NATURAL RESOURCE MANAGEMENT POLICY

The Division of Parks and Recreation's approach to natural resource management is dictated by the North Carolina Constitution and the State Parks Act, both of which require the management of natural resources. The Constitution sets overall policy by broadly defining the conservation and protection of natural resources and the acquisition of such resources as a proper function of government. The State Parks Act states that unique archaeological, geological, biological, scenic, and recreational resources are a part of the heritage of the people, which "...should be preserved and managed by those people for their use and for the use of their visitors and descendants."

The North Carolina State Parks System plays an important role in maintaining, rehabilitating, and perpetuating the state's natural heritage. The natural resources of the state parks system are: high quality, rare, or representative examples of natural communities; native plants and animals; geological features and landforms; water resources; and the natural processes that affect these elements. The primary objective in natural resource management will be the protection of natural resources for their inherent integrity and for appropriate types of enjoyment while ensuring their availability to future generations.

It is the policy of the Division that natural resources will be managed by allowing natural environments to evolve through natural processes with minimal influence from human activities. Resource management will not attempt solely to preserve individual species or individual processes; rather it will try to maintain all of the components of naturally evolving ecosystems. When intervention is necessary, direct or secondary effects on park resources will be minimized to the greatest extent possible. Intervention with natural processes may occur:

1) to correct or compensate for the disruption of natural processes caused by human activities;
2) to protect, restore, or enhance rare species;
3) to protect, restore, or enhance significant archaeological resources;
4) to prevent danger to human health and safety.

NATURAL COMMUNITIES

These communities follow the Classification of the Natural Communities of North Carolina: Third Approximation (Schafale and Weakley, 1990).

PIEDMONT/LOW MOUNTAIN ALLUVIAL FOREST

This community type occurs on river or stream floodplains. Floodborne sediments provide nutrient input, and although site quality may vary depending on the nature of the alluvial material, most alluvial sites are more fertile than the surrounding uplands. This community occurs in the park on the floodplains and tributaries of Bear Swamp Creek and Little Fishing Creek. Since the watershed is primarily forested uplands, this area is not particularly flood prone. The canopy is dominated by species that are typical of moist, bottomland areas and includes water oak (Quercus nigra), swamp chestnut oak (Q. michauxii), sweet gum (Liquidambar styraciflua), and river birch (Betula nigra). The subcanopy contains ironwood (Carpinus caroliniana), red maple (Acer rubrum), and flowering dogwood (Cornus florida). The shrub layer supports a mixture of hardwoods, including virburnum (Viburnum dentatum), as well as dense thickets of speckled alder (Alnus serrulata). The soils near the creeks are rich and support a variety of herbaceous and flowering species, including orange flowered jewelweed (Impatiens capensis), may apple (Podophyllum peltatum), false solomon's seal (Smilacina racemosa), poison ivy (Rhus radicans), and atamasco lilies (Zephranthes atamasco).

PIEDMONT MONADNOCK FOREST

This community is generally found on dry, upper slopes and ridges leading to monadnocks. Although these forests are found throughout the Piedmont, they are rare in the northeastern Piedmont. Two examples of this community occur in the park; the first occurs low on the north slopes of Medoc Mountain and is dominated by chestnut oak (Q. montana). Other canopy dominant species include white oak (Q. alba), northern red oak (Q. rubra), black oak (Q. velutina), mockernut hickory (Carya tomentosa), loblolly pine (Pinus taeda), and red maple. These species generally favor dry, well drained upland areas. The presence of chestnut oak is particularly noteworthy, since Medoc Mountain represents the easternmost occurrence of this species in North Carolina. The loblolly pines may be remnants of a pine community that established in the wake of extensive logging in the 1930s. However, because of the site's dryness, they may have been present historically since pines are generally considered to be a more important component of Monadnock Forests than of other Piedmont forests. The subcanopy in this area is composed primarily of canopy species.

The shrub layer is dominated by a dense mountain laurel (Kalmia latifolia) component and also includes Pinxter azalea (Rhododendron

nudiflorum), fringe tree (Chionanthus virginicus), sparkleberry (Vaccinium arboreum), squaw huckleberry (V. stamineum), dwarf huckleberry (Gaylussacia dumosa), and dangleberry (G. frondosa).

The second example of this community occurs on Medoc Mountain's south/southwest facing middle and upper slopes. The canopy includes the same hardwood species found on the north facing slopes, with chestnut oak again being the most prominent hardwood. However, the canopy is dominated by short leaf pine (P. echinata), which may be a consequence of post-logging invasion. Though numerous, the hardwood species will probably not dominate the canopy for several decades. The shrub layer is dominated by sparkleberry, squaw huckleberry, and lowbush blueberry (Vaccinium pallidum).

MESIC MIXED HARDWOOD FOREST - PIEDMONT SUBTYPE

This community type generally occurs on the lower slopes of steep, north facing ravines. These forests are usually unevenly aged and feature large, mature trees. The best example of this community in the park occurs on the very steep, sheltered bluffs overlooking Little Fishing Creek in the Little Fishing Creek Registered Natural Heritage Area. American beech (Fagus grandifolia) dominates the canopy, particularly on the steepest slopes; many of the beeches have a diameter-at-breast height (dbh) approaching 20 inches. Additional hardwood species in the canopy are few and are most prominent on the low slopes and adjacent moist bottomlands. They include white oak, red maple, black gum (Nyssa sylvatica), yellow poplar (Liriodendron tulipifera), and sourwood (Oxydendrum arboreum).

Sparse occurrences of mountain laurel and Pinxter azalea dominate the shrub layer; the herbaceous layer is poorly developed and is dominated by wild ginger (Hexastylis virginica), woodrush (Luzula echinata), and christmas fern (Polystichum acrostichoides). The lack of well developed herb or shrub components is atypical for this community type when compared to similar sites in the Piedmont. According to park staff, the area has suffered considerable abuse in the past from its use as a dump site by local residents, and it is likely that such dumping disturbed the soil and effectively destroyed the understory. In time, the understory vegetation may recover completely.

NATURAL HERITAGE PROGRAM ELEMENT OCCURRENCES

NEUSE RIVER WATERDOG (Necturus lewisi)

This large salamander species has been assigned Special Concern status by the Wildlife Resources Commission, meaning that its population has been deemed to require monitoring. It is endemic to North Carolina and is found only in the Neuse and Tar River drainages. It has been recorded in the park from Little Fishing Creek.

LEWIS'S HEARTLEAF (Hexastylis lewisii)

This herbaceous species is also known as wild ginger. It has been assigned Candidate status, meaning that although there is little evidence of declining numbers, its habitat and numbers are small or limited. The most recent park record for this species is from 1993, when large numbers of it were found growing near Little Fishing Creek along the Summit Trail south of the junction of Little Fishing Creek and Bear Swamp Creek.

REGISTERED NATURAL HERITAGE AREAS

MEDOC MOUNTAIN REGISTERED NATURAL HERITAGE AREA

This area covers 185 acres and includes the mountain for which the park is named. Rising to an elevation of 325 feet, Medoc Mountain is a residual landform that has resulted from more rapid erosion of the surrounding landscape. Geologically, it is classified as a monadnock. The mountain's topography is unusually steep for this region of the state, and rock outcrops near the summit are some of the eastern-most natural exposures of crystalline rock in the state. The area is also geologically significant due to the presence of large quantities of molybdenum ore. Significant natural communities include Piedmont Monadnock Forests on the mountain's northeast and south/southwest facing slopes. These forests, which are more typical of the western piedmont and mountains, represent the easternmost occurrence of chestnut oak in the state. A well developed Piedmont/Low Mountain Alluvial Forest occurs at the base of Medoc Mountain near the confluence of Little Fishing Creek and its tributary (Figure VI-1).

LITTLE FISHING CREEK BLUFFS REGISTERED NATURAL HERITAGE AREA

This area covers 20 acres and occurs on steep northwest to northeast facing slopes above Little Fishing Creek in the park's southwestern corner. The bluffs in this area rise abruptly from the stream and are a good example of a beech ravine. Slopes exceed 70% in some areas and mature beech trees dominate the forest, with some individuals exceeding 19 inches in diameter. The flood plain adjacent to the bluffs supports a number of extremely large trees,

including loblolly pine (51 inches dbh), sweetgum (35 inches dbh), and willow oak (Q. phellos) (37 inches dbh).

The area has suffered in the past from use as a dump site by local residents for many years. Understory vegetation was particularly affected, but in time, this area may regenerate into a more complete example of a steep, beech dominated bluff. The waters in Little Fishing Creek support over a dozen species of fish as well as the Neuse River Waterdog, which is the park's most significant animal species.

RESOURCE MANAGEMENT ISSUES

NATURAL RESOURCE INVENTORIES

A comprehensive, updated natural heritage survey is needed for the entire park. These inventories would help identify additional high quality areas for designation as Registered Natural Heritage Areas and would provide baseline data for a natural resources monitoring program. Such data would also allow for expanded interpretation and education programs. In addition, there are several species that are tracked elsewhere in the state by the Natural Heritage Program but whose status at Medoc Mountain is not clear. Updated information on these species' status in the park would alert park staff to monitor for their presence.

EXOTIC SPECIES

Several invasive exotic plant species, including privet, kudzu, and honeysuckle, are present in the park, particularly in disturbed areas or old home sites. Park staff are aware of the locations and identities of these species. These species are persistent and difficult to control or eradicate. Efforts to control these species need to balance the benefits of control or removal with the costs of materials and staff time.

PINE PLANTATION MANAGEMENT

Several pine plantations located along SR 1322 in the vicinity of the Little Fishing Creek bridge were acquired when the land in this area was purchased. These stands are crowded and since they are planted in rows, they are aesthetically unappealing. Leaf litter loads are high and these stands represent a potentially serious fire hazard. There are several management options for these plantations: biologically, it would be in line with the Division's Resource Management Policy to simply leave these forests to the natural successional process. However, as the stands decay over time, fuel loads could grow dangerously high, increasing the chances of an uncontrollable fire. A second option would be to thin the stands, either by girdling or by felling trees. This

would open up the canopy, diminish the row-like appearance, and decrease the amount of large standing and down fuels. A third option would be to conduct dormant season controlled burns to reduce fuel loads. Resource management staff will work together with park staff to explore each of these options and to develop a management plan within the next five years.

VISTA MANAGEMENT

The view of Medoc Mountain is in danger of being blocked by trees growing near the old fields that are adjacent to the park's main picnic area. This is the clearest view of the mountain in the park and offers visitors their best opportunity to appreciate the uniqueness of the area's topography. In order to keep the view of the mountain open, park staff have maintained the vista by selectively removing the tallest trees. Resource management staff recommend continuing the practice of selectively removing only those trees that constitute a major threat to the vista.

NOISE IMPACTS FROM RACE TRACK

There is a small but popular automobile race track located near the intersection of SR 1322 and NC Highway 561. Noise impacts from this facility are most noticeable on weekends, particularly at night. The placement of future park facilities should be carefully considered in the light of the race track's potentially adverse noise impacts.

WATER QUALITY IN LITTLE FISHING CREEK

Analyses of Little Fishing Creek, which is the park's main stream, and its tributaries, have concluded that biodiversity and water quality are excellent. These waters provide habitat for the Neuse River waterdog, and the Division of Environmental Management's Environmental Planning Section has documented the occurrence of over 50 invertebrate species. Since the watershed supplying these streams is not contained within the park's current boundaries, the Division should seek to protect stream quality and biodiversity by continuing to monitor external threats with the assistance of other state agencies. Water quality in the park should be safeguarded by ensuring that resource management staff are consulted prior to facility placement. Best Management Practices should be employed on all capital improvement projects.

FOREST PESTS

Southern pine beetles infestations have occurred on park lands in the past, and there are currently several areas in the park where the beetles are active. Although these insects may cause the loss of trees, under the Division's resource management policy, this

activity is considered a natural process in the park's ecosystem. Therefore, it should be allowed to continue. However, beetle activity should be monitored by park staff, and the practice of removing standing dead trees which endanger permanent facilities and high use areas should be continued.

ROAD CLOSING

Secondary road 1332 goes through the park, and there are several accesses to private property off this road. The development of master-planned facilities in the park is dependent on closing of this road to through traffic. The land acquisition plan calls for acquiring property that has access across park lands. Closing the road would dramatically improve the park's ability to provide visitor facilities and services. Once the road is closed it will become the main internal park road.

RESOURCE MANAGEMENT PLAN

A comprehensive, park specific resource management plan addressing these and future resource management issues should be developed. This plan should include detailed actions whose implementation will prevent or correct threats or damage to significant natural resources.

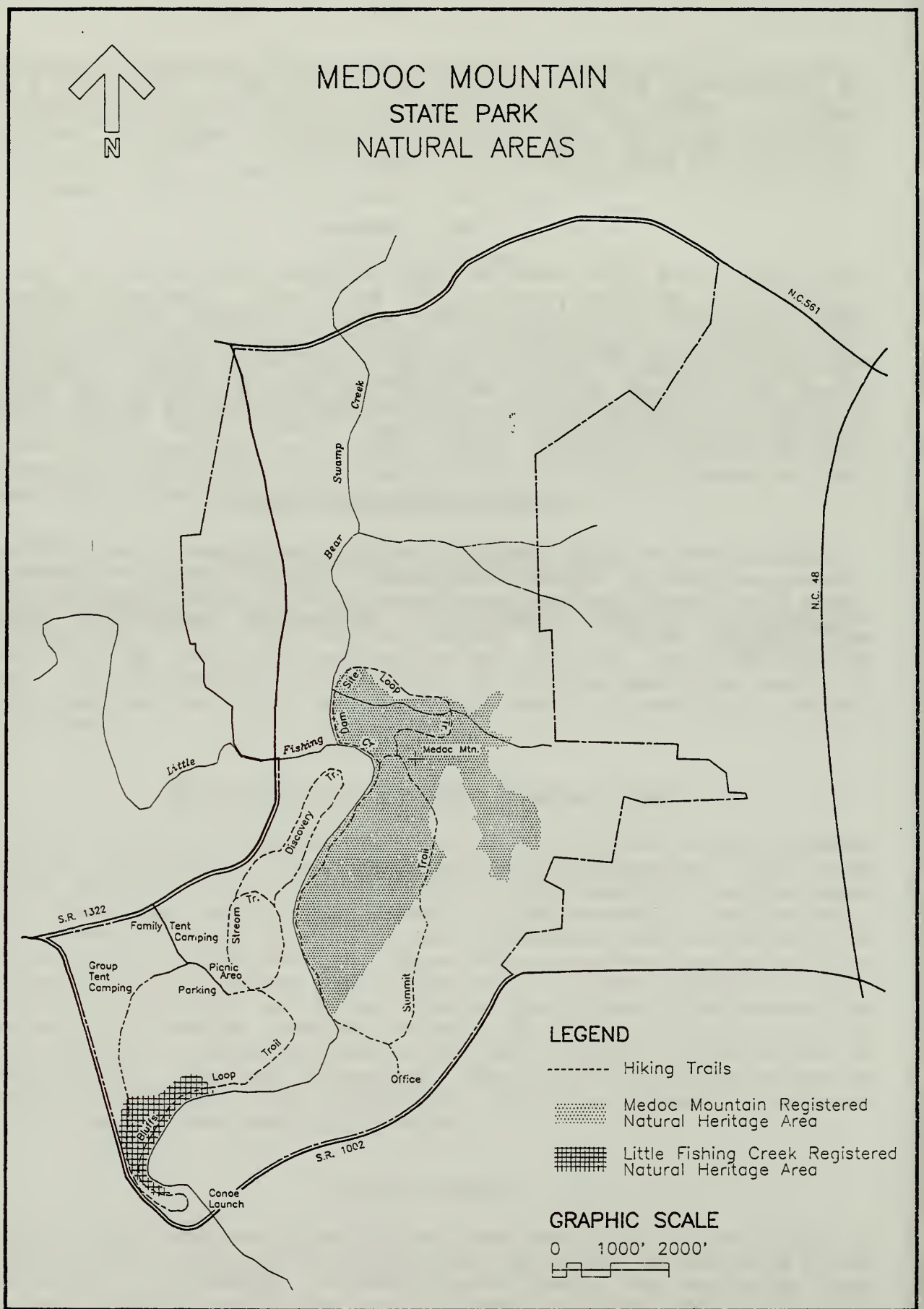


Figure VI-1. Registered Natural Heritage Areas

VII. PHYSICAL PLANT INVENTORY

FACILITY INVENTORY AND INSPECTION PROGRAM

The buildings in state parks are needed for park operations and visitor services. These buildings and facilities are essential components of protecting the public's health and safety. They include facilities providing safe drinking water, restrooms, and electricity, as well as recreation facilities such as bathhouses, group camps, and cabins. Without proper maintenance, these facilities are, at best, a disservice to the citizens who use them, and at worst, potentially harmful.

The Facility Inventory and Inspection Program (FIIP) is a computer-based system used to track the condition, maintenance needs, and repair costs of every building in the state parks system. A principal objective of FIIP is to identify deficiencies that may affect health, fire, or life safety. Other objectives are to identify accessibility deficiencies and other significant maintenance-related deficiencies.

During a field evaluation of each facility, deficiencies are given priority ratings of critical, serious, or minor. The deficiencies are classified in nine basic categories: site (the grounds and walkways surrounding the building); exterior envelope; interior envelope; fire/life safety; handicapped accessibility; public health; heating/ventilation/air conditioning (HVAC); plumbing; and electrical.

The field evaluation begins with an inventory of all structures in the park. The results of the inventory are presented using the building name and state property numbers as identification. Next, the types of repairs and repair costs are listed for each building. Finally, the cost summary for the park is given using the nine basic categories of repairs (e.g. exterior envelope) and the three levels of deficiencies (critical, serious, and minor).

MEDOC MOUNTAIN STATE PARK BUILDING INVENTORY

CODE	BUILDING NAME	IN USE
026001	Park Office	Y
026002	Residence	Y
026003	Cement Storage	Y
026004	Concrete Frame House	Y
026005	Tractor Shed	Y
026006	Camping Area Washhouse	Y
026007	Wellhouse	Y
026008	Picnic Shelter	Y
026009	Barn	Y
026010	Pit Privy	Y

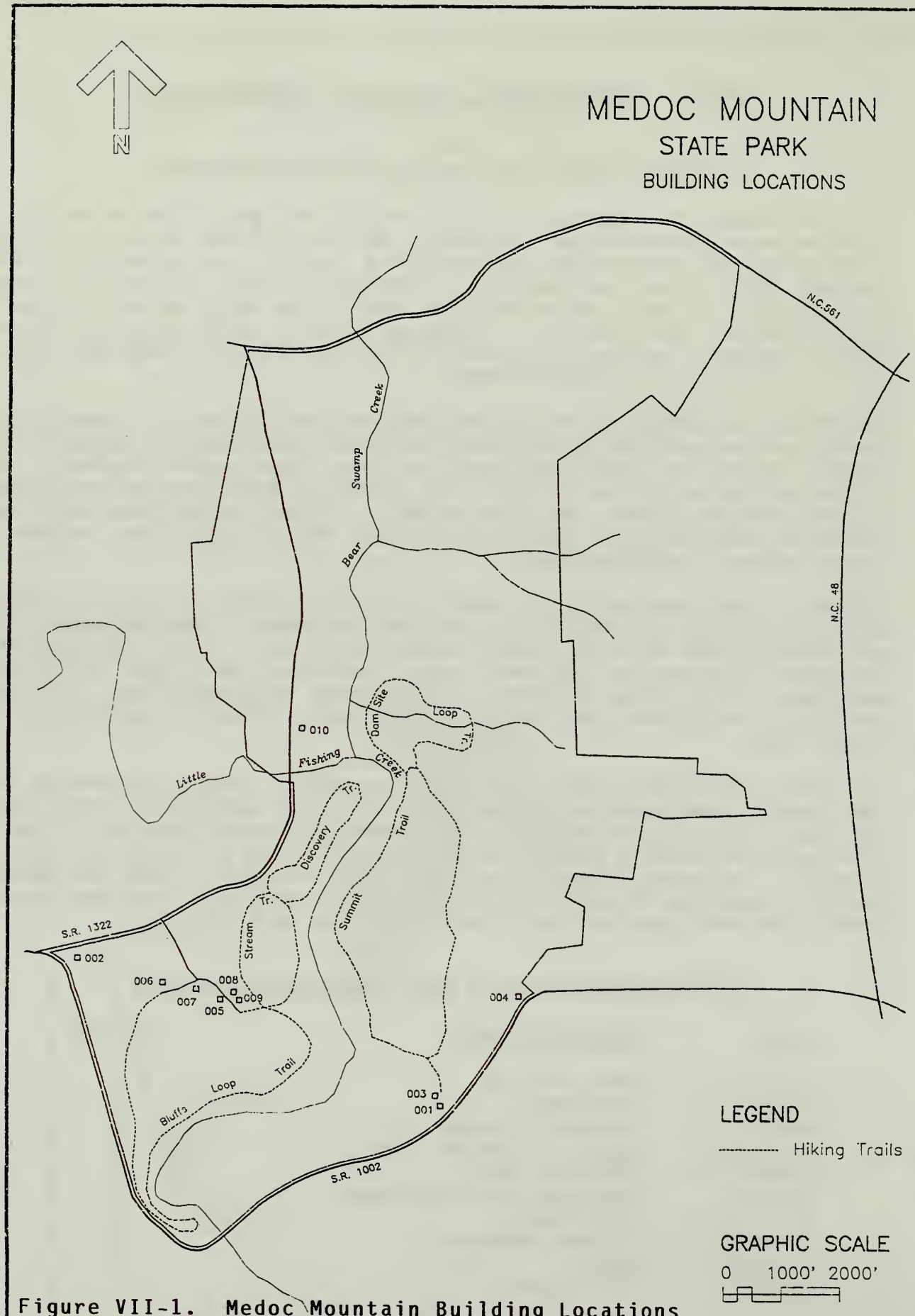


Figure VII-1. Medoc Mountain Building Locations

FACILITIES INSPECTION AND IMPROVEMENT

Buildings at Medoc Mountain are almost all in good condition. Three structures (026-001, 026-002 and 026-004) need work totalling approximately $10,000 each, and the remainder need much less. There are no buildings to be demolished at Medoc Mountain.

Handicapped Accessibility:

Three buildings need work to meet accessibility codes. The office (026-001) needs work on parking and access into the building. The washhouse (026-006) requires both parking and plumbing modifications, and the picnic shelter (026-008) needs parking and drinking facilities and an accessible picnic table.

NOTE: Only buildings needing work are included on this list.

MAINTENANCE NEEDS

Bldg. #	Building Name/Need	Demolition Cost	Repair Cost
026001	Park Office		$ 9,523
	Add accessible parking, path, and threshold		3,278
	Add chimney cap		90
	Replace vinyl flooring		941
	Refinish oak floors with satin finish		975
	Add floor insulation		900
	Repair WC, cap unused plumbing line		135
	Replace damaged door and front storm door		704
	Repaint interior walls		2,500
026002	Residence		$ 15,028
	Replace wiring, provide grounding		7,170
	Replace crawl space door and jamb		143
	Replace chimney cap		90
	Replace sliding doors with French doors		570
	Rebuild broken brick threshold		78
	Paint exterior trim		600
	Replace thermostat		132
	Replace storm doors and storm window		714
	Replace water heater		533
	Replace floor joists, subfloor and flooring in bathroom		4,998

Bldg. #	Building Name/Need	Demolition Cost	Repair Cost
026003	**Cement Storage House**		$ 413
	Add vent through wall		150
	Replace damaged wood in door; stain to match		120
	Replace cracked window pane		51
	Scrape and repaint wood trim		93
026004	**Concrete House (Shop)**		$ 14,636
	Replace windows and storm windows		7,736
	Tuck point cracking mortar joints		225
	Repaint exterior walls and trim		2,175
	Add gas pack HVAC		4,500
026006	**Camping Area Washhouse**		$ 5,242
	Renail loose siding and repaint all		1,335
	Bring parking, water fountain and toilets up to codes for accessibility		3,741
	Regrade for correct drainage		75
	Add drain valve on water heater line		90
026007	**Wellhouse**		$ 453
	Replace damaged siding and repaint all siding		303
	Regrade for drainage away from building		150
002008	**Picnic Shelter**		$ 3,247
	Add HA parking, drinking fountain and table		1,622
	Replace hose bibbs with key-operated faucets		225
	Replace torn screen		60
	Restain siding and trim		900
	Repaint toilet room ceilings		405
	Regrade for drainage away from building		38
026009	**Barn**		1,020
	Add clear wood sealer to siding		
026010	**Pit Privy**		$ 243
	Replace siding		
	TOTAL:		$ 45,304

FACILITY REPAIR NEEDS COST SUMMARY

DEFICIENCY CATEGORY	PRIORITY 1 (CRITICAL)	PRIORITY 2 (SERIOUS)	PRIORITY 3 (MINOR)	CATEGORY SUBTOTAL
SITE	0	225	38	263
EXTERIOR ENVELOPE	90	14495	2664	17249
INTERIOR ENVELOPE	0	7814	2906	10719
FIRE/LIFE SAFETY	0	0	0	0
HANDICAPPED ACCESS	0	8639	0	8639
PUBLIC HEALTH	0	0	0	0
HVAC	150	132	0	282
PLUMBING/UTILITY	0	360	623	983
ELECTRICAL	7170	0	0	7170
	7410	31664	6230	45304

Deficiencies that are a threat to fire and life safety or the health of an individual are considered to be "critical." A "serious" deficiency is one that is not considered a threat to fire and life safety, but which could cause further damage to the structure if left uncorrected. This category usually includes building code violations. "Minor" deficiencies are those requiring general maintenance and repair.

MEDOC MOUNTAIN STATE PARK ROAD AND UTILITY INVENTORY

This survey gives a brief description of the park infrastructure (roads, water, sewer, electrical, and telephone) and makes general recommendations on upgrading and maintaining these systems. The information is based on an inspection of the park facilities on October 27, 1992, with park personnel. Other information comes from the Institute for Transportation, Research and Education's (ITRE) study on roads, original construction drawings, and past experience with construction projects at the park.

The majority of the infrastructure at Medoc Mountain was built in late 1980 and 1981 when a major capital improvement project was implemented. The project consisted of a day-use area and camping area. The day-use area consists of a picnic shelter with toilets, an access road, and parking area. The camping area consists of a washhouse, access road, and parking area. No other major capital improvement projects have been funded since then.

The infrastructure of the park is in fair shape since it is only 11 years old. The water system is in need of some repair, but the rest of the facilities are holding up well.

This inventory is divided into five major sections: roads and parking areas; water system; sewer system; electrical system; and telephone service. Each section is broken into two parts - existing conditions and system recommendations.

ROADS AND PARKING AREA

Existing Conditions

According to the Institute for Transportation, Research, and Education's (ITRE) study completed in March 1990, there are .47 miles of paved and 1.5 miles of unpaved roads, including the path to Medoc Mountain that is closed except for park staff use. There are 1,091 square yards of paved parking areas and 2,773 square yards of unpaved parking area (the horse trailer parking area). The typical park road section consists of a 20-foot-wide road with an 8-foot-wide road shoulder sloped to ditch line. The campground road is 18 feet wide with 4-foot shoulders.

The main road and picnic area parking lot have an 8-inch stone base with a 1-1/2-inch layer of I-2 asphalt. The picnic area parking lot does not have curb and gutters, but does have concrete bumper stops located one foot from the edge of the pavement. There are 30 spaces for cars at the picnic area parking lot. The road and parking lot have no pavement striping. The campground road is graveled and is 18 feet wide with a 6-inch stone base. It is currently maintained by the North Carolina Department of Transportation.

The main park road shoulders are in good shape and are mowed by park staff. The road shoulder slopes down to a one-foot ditch that is easily maintained by mowing equipment. A good stand of grass is on the road shoulders. The road culverts and catchbasins are concrete and are in good shape.

The primary unpaved road within the park serves as a service road and a hiking trail to Medoc Mountain. It's in fair shape mainly due to the low volume of traffic. There are small trees growing along the shoulders. The turning radius at the entrance to the main park road needs to be widened. It has a 3-foot-deep ditch with only a 2-foot shoulder. The parking lot at the day-use horse trail and primitive camping area has no gravel in the parking area, but with the low volume of traffic, it seem to be holding up with just a grass surface.

The bridge that crosses Little Fishing Creek on SR 1322 belongs to the North Carolina Department of Transportation, but it is in poor shape and will soon need some major repair. It's a one- lane, low-tonnage wooden bridge that serves primarily local and park visitor traffic. The N.C. Department of Transportation is planning to replace the bridge over Little Fishing Creek on SR 1322 by 1995.

Recommendations

The main park road and picnic parking area are in fair shape and should not need resurfacing for another five to eight years. The main park road and parking lot need striping. Estimated cost for this is $250. This can be handled through NC DOT funding in next year's budget. The turn at the park entrance needs to be widened.

In the current 1992-93 budget for roadway maintenance with the North Carolina Department of Transportation, $1,000 is allotted to maintain the park gravel roads. This should be adequate to maintain the roads.

SEWER SYSTEMS

Existing Conditions

All facilities at Medoc Mountain are served by individual septic tanks and separate drain fields. All systems seem to be functioning properly.

The camping area washhouse has two 1500-gallon pre-cast septic tanks with a distribution box. There are five 100-foot nitrification lines. The septic tanks have no inspection risers and have never been pumped out.

MEDOC MOUNTAIN

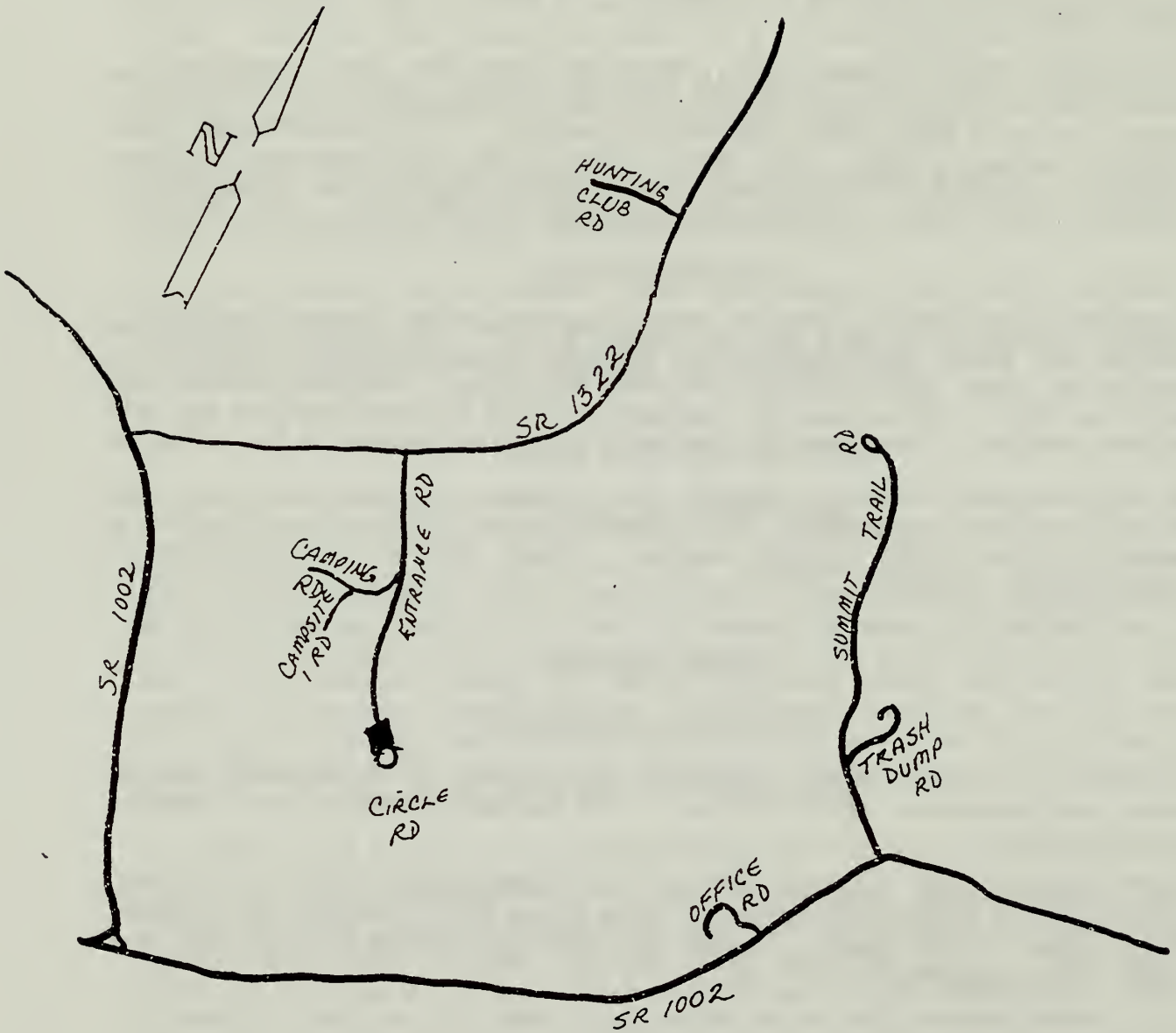


Figure VII-2. Medoc Mountain Road System

The picnic area toilet building has two 1000-gallon pre-cast septic tanks with a distribution box. There are five 100-foot nitrification lines. The septic tanks have no inspection risers and have never been pumped out. The park office, maintenance area, and superintendent's residence all have conventional 1,000-gallon septic tanks with a distribution box. The number of nitrification lines each system has is unknown. There are no risers on any of the tanks, and it is not known if the tanks have ever been pumped out.

Recommendations

Inspection risers should be installed on all septic tanks within the park. The estimated cost is $2,800. All seven septic tanks should be pumped out and inspected for leaks. The estimated cost is $1,000. Water meters should be installed at the bathhouse and picnic toilet building to determine water flow into the sewer systems. The estimated cost is $600.

WATER SYSTEM

Existing Conditions

Water is supplied to the day-use and camping areas by one 375-foot, 6-inch water well that produces 16 gallons per minute. This well was drilled in October 1982 after the original well drilled in 1980 developed sedimentation problems.

The well house is approximately 360 feet away from the well and has a 2500-gallon hydropneumatic water storage tank complete with pressure controls, air balancing system, heater, and chlorination equipment. The air compressor is not working at the present time. The chlorinator is operational, but requires constant maintenance due to age. It should be replaced. The distribution system at the day-use area consists of approximately 2600 linear feet of 2-inch PVC water line with four 2-inch gate valves.

The office area is served by a bored 30-inch shallow well with very low yield. It has a 1/2 h.p. submersible pump that came from Raven Rock State Park. The water is of poor quality.

The superintendent has a 24-inch bored well with a 1/2 h.p. jet pump. The well yield is unknown and quality is marginal. The maintenance shop has a 30-inch bored well of unknown yield and poor quality. The horse trail and primitive camping area located off of SR 1322 has a 6-inch drilled well of unknown yield and quality. It has a hand pump at the present time.

Recommendations

An extension of the county water system that would bring water lines down SR 1002 is in the design stage. The system extension is

projected to be built by late 1993 or early 1994. It is recommended that the office, superintendent's house, and day-use camping area be tied into this system. Estimated cost to tie all three systems together using a 2-inch meter with approximately 1600 linear feet of 6-inch distribution lines with tap-on fees is $15,000.

Until the county water system is installed, it is recommended that a chlorinator be replaced at the day-use well house. The estimated cost is $500.

ELECTRICAL SYSTEM

Existing Conditions

The day-use area and camping area is supplied by a 7 KV primary underground cable that begins at an overhead pole at the park entrance at SR 1322. It follows the main road to the picnic area and branches off at the camping access road and goes to the washhouse.

There are approximately 3700 linear feet of 7 KV primary cable and approximately 400 linear feet of secondary underground cable. There are three pad mounted transformers at three separate locations, utilizing single phase three wire 120-240 volt wiring to feed individual panels at three locations.

The power is furnished and owned by Halifax Electric Membership located in Enfield, North Carolina. The park office, superintendent's residence, and maintenance shop are supplied power by overhead service from transmission lines along 1002.

Recommendations

The present underground power line located at the day-use and camping area is in good shape and is being maintained by Halifax Electric Membership Corp. The overhead service located at the superintendent's house and office should remain overhead.

TELEPHONE SYSTEM

Existing Conditions

The park is provided phone service by Carolina Telephone located in Rocky Mount, North Carolina. The park office has two separate phone lines, with one line being dedicated to the park FAX machine. There are three phone extensions within the office. The only public phone in the park is located at the picnic area parking lot. The park superintendent has a separate line at his residence. The radio and MARTI system is located at the N.C. Forestry firetower .25 miles from the park office.

Recommendations

There are no recommendations for upgrading the system. The phone company will continue to maintain phone service to the park.

SUMMARY OF ROAD AND UTILITY INVENTORY

Overall, the park is in good shape with no major infrastructure improvements needed to existing utilities. The water system needs to be tied into the county system when it's constructed in 1993. The sewer systems all appear to be functioning properly and, with some routine maintenance, should be fine for several years. The electric and phone systems are owned and maintained by public utility companies and are in good condition.

MAJOR CAPITAL IMPROVEMENT PROJECT PRIORITIES

The Medoc Mountain State Park Master Plan describes the long-range vision of what the park should be. A significant portion of the master plan is devoted to identifying short- and long-term development plans for the park. The development plans are to be implemented by identifying and detailing specific capital improvement projects that can be constructed through the state construction process. By identifying, evaluating and ranking each development project, the Division has created a priority list of capital improvement projects for each park and for the state parks system. The Medoc Mountain State Park project ranking is based upon objectives such as promoting public health, protecting natural resources, enhancing environmental education, increasing public accessibility, and improving the park's appearance.

As a part of the general management plan process, the master plan with its proposed development was carefully reviewed to determine if changes were needed. Such a review had not been undertaken since the master plan was published in 1975. Changes in development plans were deemed necessary. The original project priority list, shown below, was based upon development proposed in the park master plan. The original project priority list represented a logical and reasonable first phase of development needed for a functioning park. It did not represent a total listing of proposed master plan development. Recommended changes to that list and the revised project list follow.

In reviewing master plan capital improvement recommendations, the general management plan evaluation team considered factors such as changes in environmental regulations, condition of facilities, natural heritage inventory, changes in recreation demand, park visitor safety considerations, State Parks Act stipulations, development adjacent to the park, and current recreation demand. This review of proposed capital improvements resulted in changes, additions, and deletions to capital improvement proposals.

ORIGINAL PROJECT PRIORITY LIST

Rank	Description	Mean Score	Total Costs
1.	Tent and trailer campground	506	$ 597,405
2.	Visitor center complex	490	350,000
3.	Trail improvements, footbridges	482	40,000
4.	Dam, bridge, road (land dependent)	472	1,500,000
5.	Maintenance building	455	231,600
6.	Pave road, 2.2 miles (land dependent)	446	250,000
7.	Lake development (land dependent)	406	2,304,426
8.	Ranger residences (2)	364	256,500
		TOTAL:	$5,529,931

RECOMMENDED CHANGES TO ORIGINAL PROJECT PRIORITY LIST

Projects to be Deleted

Ranger residences (2) ($256,500). This project deleted. Residences to be built as part of other project scopes.

Project to pave 2.2 miles of road ($250,000) will be accomplished using DOT allotment funds.

Dam/bridge/road project ($1,500,000) deleted from five-year GMP development.

Projects With Changed Scopes

The original tent and trailer campground project has been split into two projects. The family tent and trailer campground project, Phase 1 ($597,405), includes construction of a dump station, 15 primitive campsites, and 50 RV hook-up sites. This project is to be completed with bond funds.

Construct small scale visitor center, one loop of tent and trailer camp with dump station, and maintenance complex that includes a shop, warehouse, flammable storage, and vehicular and lumber storage buildings. ($1,486,700) This project is to be completed with bond funds.

Trail improvements project ($124,700) includes renovation of all trails within the park, including rerouting the trail to the summit of the mountain. The foot bridge has become a separate project.

Picnic area, shelter, road and bridge project ($2,025,100): The road and bridge that opens up this side of the park has been linked

with the picnic areas, both group and family, which are not land dependent.

Projects to be Added

Miscellaneous building repairs project ($48,200) includes most of the larger building repairs as per the FIIP inventory.

Group camp and canoe launch project ($644,700), including four group camps around a common washhouse, has been added because of the displacement of the group camp by the relocation of the family tent and trailer campground. Construction of a ranger residence is also included. Improved canoe access is needed for Little Fishing Creek.

Tent and trailer campground, phase II ($830,200) - This second loop will be added as demand dictates. It includes hookups for 25 sites, bringing the park total to 75 standard sites and 50 sites with hookups. Also includes a ranger residence.

Foot bridge across Fishing Creek ($44,900) - This project was removed from the trails package project and added as a separate project because of the possibilities of separate funding or volunteer participation in construction.

Lookout tower project ($79,300) was added to enhance the park visitors' enjoyment and understanding of the area's geography by allowing views at tree-top level.

For further explanations of these projects, see Appendix B.

Other Future Development

The Medoc Mountain State Park Master Plan recommended development of an 18-acre lake, a bathhouse, boathouse, swimming beach, and parking for 200 cars. The Medoc Mountain Park Advisory Committee recommends that such recreational development be postponed until the next GMP cycle in five years. The Committee is concerned that there is insufficient environmental clearance for construction of a lake at the park and that the proposed lake would be too easily accessible in off hours. The Committee also rated other development plans a higher priority.

There is still a need for aquatic recreation in the region, and development of the lake and associated recreational facilities will be again considered in the next GMP cycle.

REVISED PROJECT PRIORITY LIST

Rank	Description	*Mean Score	Total Costs
1.	Visitor center, camping, maintenance		$1,486,700
2.	Tent & trailer campground, Phase I		597,405
3.	Foot bridge across Fishing Creek	651	44,900
4.	Tent & trailer campground	615	830,200
5.	Group camp dev., boat launch (land dependent)	595	644,700
6.	Picnic areas, access road, bridge, parking	585	2,025,100
7.	Lookout tower	578	79,300
8.	Miscellaneous building repairs	572	48,200
9.	Trail improvements	549	124,700
		TOTAL:	$5,882,205

* The mean score comes from the Division's Project Evaluation Program (PEP). The PEP uses an evaluation formula to rank projects that considers four factors: the objective of the project (a project can have both a primary and a secondary objective); the justification or urgency for funding; the estimated annual number of persons (visitors and/or employees) who are affected by the project; and the project's local, state, or national significance. Projects are evaluated by the park superintendent, district superintendent, and Division management.

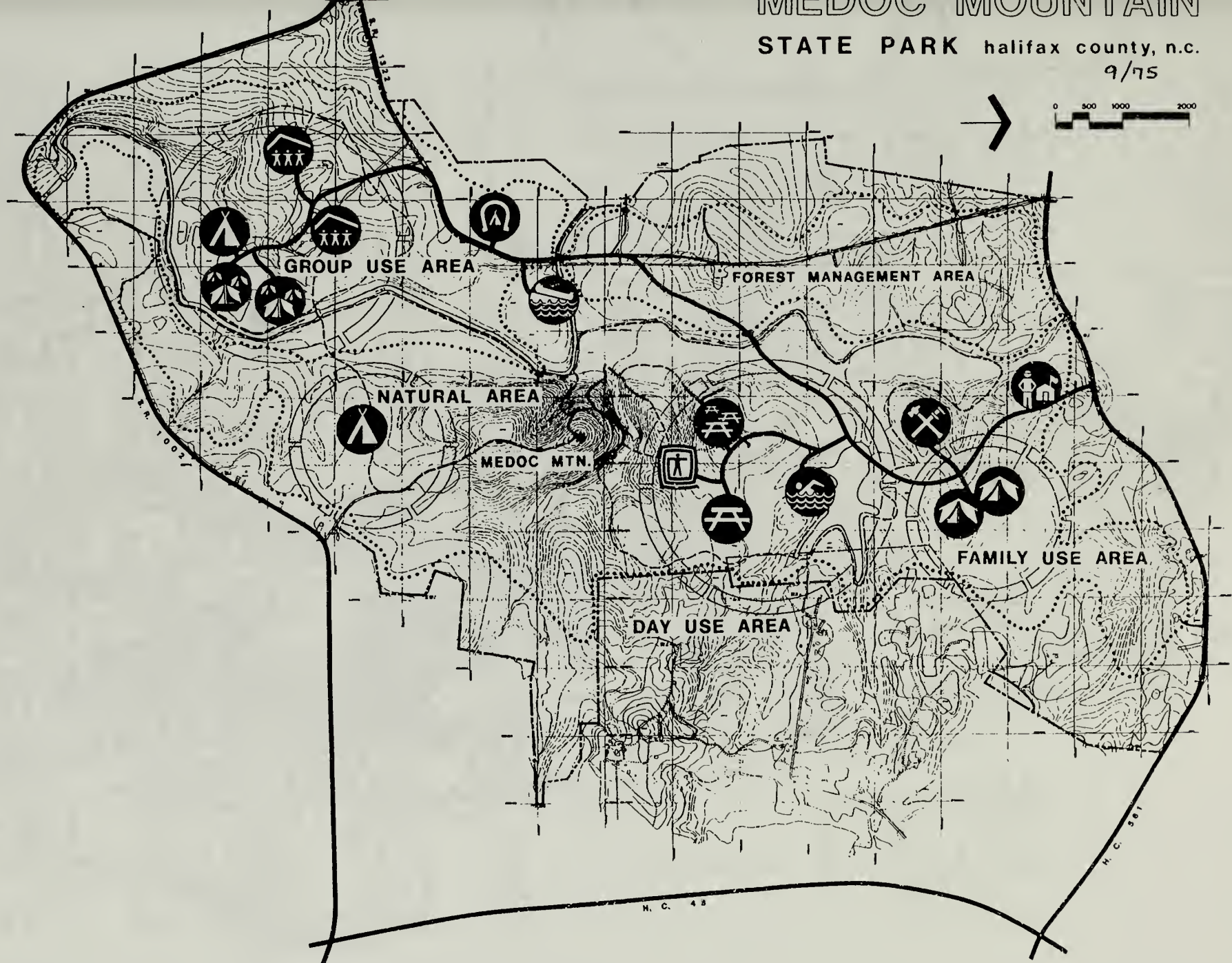
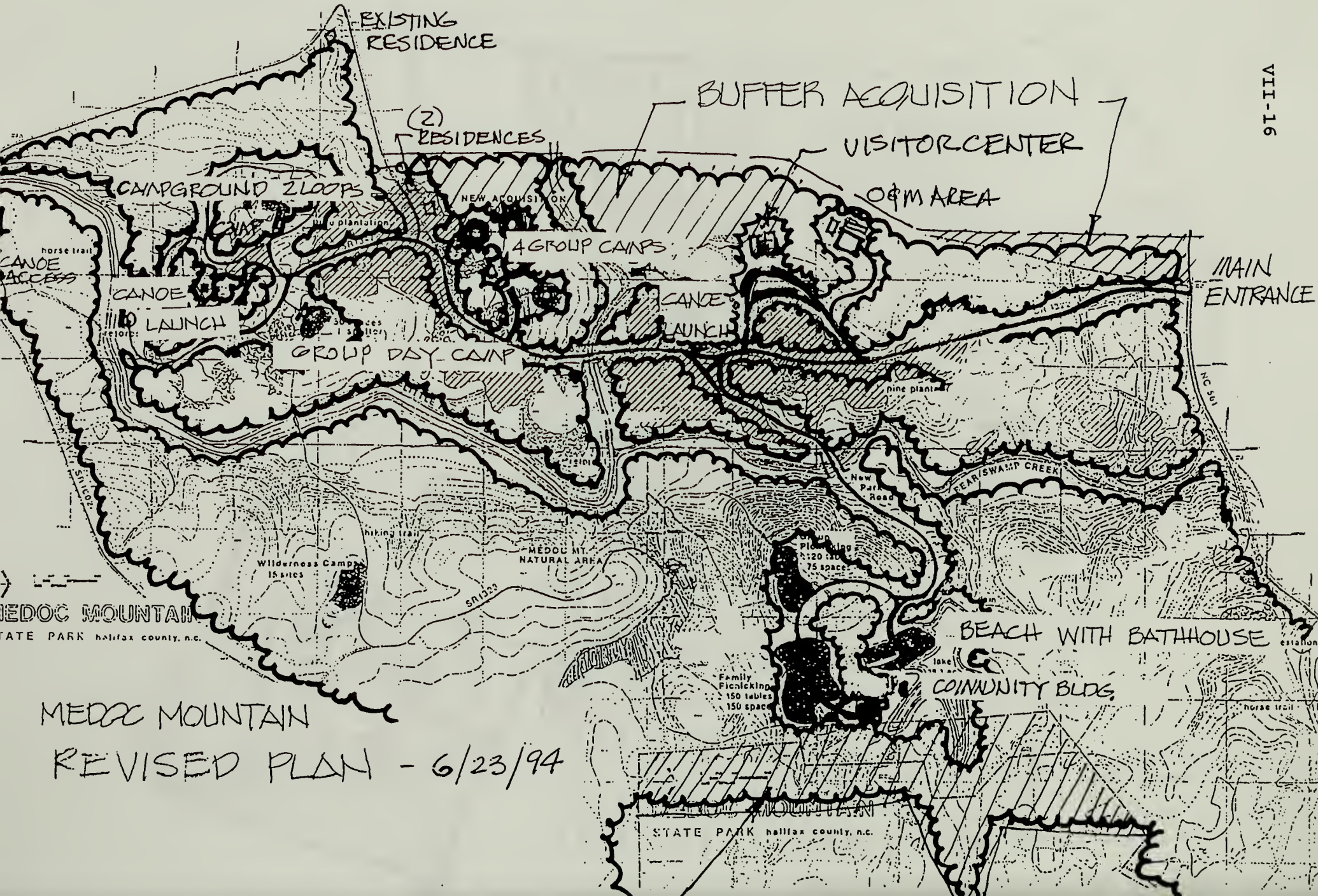


Figure VII-3. Original Master Plan Development



MEDOC MOUNTAIN

REVISED PLAN - 6/23/94

VIII. PARK OPERATIONS

INTRODUCTION

The major issues concerning Medoc Mountain were identified by Division of Parks and Recreation staff at the initiation of the general management plan process. The issues have been divided into three categories: natural resources (see Chapter VI), capital improvements (see Chapter VII), and operations. This chapter identifies park operations issues at Medoc Mountain and makes recommendations for addressing those issues during the next five years.

Seven operations/management issues are of significant concern at Medoc Mountain State Park. They are:

1. staffing levels;
2. operating and equipment budget;
3. inadequate shop/maintenance area;
4. hunting club use of park road;
5. canoe take-out safety concerns;
6. economic development grant funding; and
7. trail system needs.

STAFFING LEVELS

Present staffing at Medoc Mountain is not adequate to properly manage the park as it exists today. Medoc Mountain currently has three permanent staff positions and four seasonal staff.

Additional staff is needed to adequately patrol the park, conduct interpretation and education programs, manage facilities, cover administrative/office/clerical duties, provide for visitor safety, and manage natural resources. These duties require significant amounts of staff time.

With very little promotion of the park taking place, annual visitation now approaches 50,000 annually. Almost 8,400 visitors either attended or participated in an educational or interpretive program in 1991. The visitors expect the park office to be open during park operating hours, including weekends. A park ranger I is needed to perform ranger duties involving public safety, interpretation and education, and natural resource protection. A previously existing park ranger I position was eliminated in 1987 because of statewide reduction in forces.

A minimum of three commissioned enforcement staff are required to cover all operating hours. Minimum park operating hours are 8 a.m. to 6 p.m., seven days a week, a total of 70 hours. For much of the year, the park is open for public use even more hours. In the summer, weekly hours of operation expand to 91 per week. To better

staff the park office and serve the public, the addition of a clerk-typist is needed. The park currently has no clerk-typist.

A park ranger I and clerk-typist are needed to adequately staff the park as it currently exists.

Table VIII-1. Current Staffing Needs

Existing Staff	Proposed Additional Staff
1 Superintendent I	1 Clerk-typist
1 Ranger II	1 Ranger I
1 Maintenance Mechanic	
2 General Utility Workers (seasonal)	
1 6-Month (March-May; Sept.-Nov.)	
1 3-Month (June-August)	
1 Park Attendant (seasonal)	

When the major capital improvement priorities that are discussed in Chapter VI are completed, Medoc Mountain will require additional staffing to meet the increased work load concomitant with the building of new facilities. For example, the addition of a campground, picnic area, lake and bathhouse will cause additional cleaning, maintenance and public safety duties. These new positions will be added as the new facilities are completed.

OPERATING AND EQUIPMENT BUDGET

The budget for operations, equipment and supplies is inadequate to effectively manage the park. All program areas are affected, including natural resource management, interpretation and education, emergency services, and maintenance.

Table VIII-2 itemizes the proposed budget needed for Medoc Mountain. As it shows, greater funding is needed in almost every line item. Permanent staffing needs were discussed previously, and their costs are not shown in the proposed budget.

Additional materials are needed so that park maintenance staff can undertake a variety of maintenance projects, particularly on trails and at the picnic area. The solar heating panels require increased maintenance as they age. Additional training is needed for park staff. Funds are needed for interpretive materials, supplies, equipment, and displays. A seasonal park attendant is needed to assist the park ranger and superintendent so they can give greater attention to interpretation and education programs and reach a greater percentage of visitors. A peak load clerk-typist is needed to help staff the office on busier weekend days.

Table VIII-2. Proposed Operating and Equipment Budget*

Line Item	Description	FY91/92	Need
1411	Temporary Wages	$10,173	$ 19,020
1491	State Parks Seasonal	8,220	10,714
2110	Janitorial Supplies	800	900
2130	Uniforms and Clothing	1,200	2,800
2190	Household and Cleaning Supplies	50	100
2310	Education and Scientific Supplies	200	1,000
2360	Medical and Agricultural Supplies	250	500
2400	Maintenance/Construction and Repair Supplies	4,000	6,500
2510	Motor Fuels and Lubricants	2,500	4,500
2520	Tires and Tubes	150	1,000
2530	Parts	600	500
2600	Office Materials and Supplies	550	1,000
2700	Purchases for Resale	0	1,000
2910	Computer Supplies	0	200
2920	Photographic Supplies	50	100
2990	Other Supplies	395	850
3111	Travel-in-State Transportation	2,786	2,800
3112	Travel-in-State Subsistence	150	1,000
3210	Telephone	1,900	2,200
3250	Postage	290	300
3290	Other Communications	25	25
3310	Electricity	2,300	2,500
3330	Natural Gas	400	400
3510	Repairs to Building	200	1,000
3590	Other Repairs and Maintenance	500	750
3600	Freight and Express Delivery	11	25
3700	Advertising	0	25
3990	Other Services	399	400
4390	Rental of Equipment	60	200
4400	Service and Maintenance Contracts	120	160
4910	Dues and Subscriptions	0	50
5100	Office Furniture and Equipment	0	1,050
5200	Data Processing Equipment	0	3,000
5300	Educational, Medical and Agric. Equipment	0	6,900
5400	Motor Vehicles	9,362	44,500
5430	Boats and Trailers	0	3,600
5500	Other Equipment	1,396	25,200
5600	Reference Books	75	75
8510	Imprest Cash	40	40
	TOTALS:	**$49,152**	**$146,884**

* This table presents an adequate operating and equipment budget for Medoc Mountain State Park given current levels of visitation, facilities, and staffing. The budget does not include salaries for permanent positions. An increase of $97,732 is needed.

A detailed equipment list is shown below (Table VIII-3) for all 5000 series line items.

Table VIII-3. Detailed Equipment Budget Needs*

Line Item	Item Description	Qty	Unit Cost	Total Cost
5100	Fax Machine	1	$ 500	$ 500
	Desk, Office	1	550	550
TOTAL FOR 5100 ITEMS				$ 1,050
5200	Computer PC/Printer/Software	1	3,000	3,000
TOTAL FOR 5200 ITEMS				$ 3,000
5300	VCR/TV Monitor	1	500	500
	Spotting Scope	1	600	600
	Microscope, Dissecting	1	600	600
	Slide Library w/Light Table	1	2,000	2,000
	Herbarium Case	1	1,200	1,200
	Display Panel, Portable	1	2,000	2,000
TOTAL FOR 5300 ITEMS				$ 6,900
5400	Dump Truck, 1 Ton	1	15,000	15,000
	Pickup Truck, 1/2 Ton	1	12,500	12,500
	Truck, 3/4 Ton w/Utility Box and Racks	1	13,000	13,000
	ATV	1	4,000	4,000
TOTAL FOR 5400 ITEMS				$44,500
5430	Canoes	8	450	3,600
TOTAL FOR 5430 ITEMS				$ 3,600
5500	Portable Radio	1	800	800
	Tractor w/Front End Loader	1	19,000	19,000
	Auger for Tractor	1	1,000	1,000
	Canoe Trailer	1	2,000	2,000
	Blade for Tractor	1	900	900
	Band saw	1	700	700
TOTAL FOR 5500 ITEMS				$24,400
TOTAL FOR ALL 5000 SERIES ITEMS				$83,450

* The equipment budget is summarized and included in the operating and equipment budget using the appropriate line item (Table VIII-2). This detailed equipment budget presents specific equipment needs within each equipment budget line item.

INADEQUATE SHOP/MAINTENANCE AREA

The Medoc Mountain State Park shop/maintenance area is an old residence that was acquired along with property purchased for park purposes. It was not designed for its current use and is inadequate. It lacks an adequate heating system, year-round employee restroom facilities, and adequate floor space for shop equipment. Rooms are simply too small for shop use.

Until such time as new and adequate maintenance facilities are constructed as recommended in Chapter VII, the existing shop/maintenance building should have repairs and improvements made to make the area workable and safer. These repairs (window replacement, cracked mortar joint repair, exterior repainting and addition of a gas HVAC system) are shown in Chapter VII under "Facilities Improvement and Repair Needs."

HUNTING CLUB USE OF PARK ROAD

State Road 1322, a dirt road that runs on the west side of the park, is used by a hunting club to access an old farm house and land used for hunting. Legal access to the old farm house is provided by a right-of-way that runs from S.R. 1322 across park property.

The existing situation results in hunters carrying firearms through the state park. It also encourages hunting on the land immediately adjacent to the park. Hunting so close to the park boundary creates occasions where hunting, intentionally or not, may take place on park property. Hunting dogs also roam on state park property.

Acquisition plans call for acquiring additional land on the west side of SR 1322, including the old farm house used by the hunting club. Acquisition of the additional land would thereby eliminate the right-of-way and the carrying of guns through the park. The acquisition would also provide the park with land needed for additional facility development as well as needed buffer. Once the acquisition is complete, SR 1322 through the park could be closed as a public road and retained for park use only.

CANOE TAKEOUT SAFETY CONCERNS

The canoe take-out/put-in located at the SR 1002 bridge over Little Fishing Creek presents a public safety problem. SR 1002 curves sharply on the southwest side of Little Fishing Creek, limiting the line of sight. In addition, parking for the access exists only on the narrow road shoulder. The existing situation is therefore dangerous both for motorists and river users.

A new canoe access area needs to be constructed on the northwest side of the bridge. The entrance to the parking area would be

located in the opposite direction from the sharp curve and would help to eliminate the public safety concerns currently existing. The new access area would also provide a much more function put-in/take-out area.

The proposed new canoe access area off SR 1002 is included in capital improvement project #5, Group Camp and Canoe Launches, described in Chapter VII and Appendix B.

ECONOMIC DEVELOPMENT GRANT FUNDING

The North Carolina Division of Parks and Recreation and Medoc Mountain State Park possess the potential for providing needed public services and outdoor recreation opportunities to the people of North Carolina and to out-of-state visitors. These needs were recognized by the citizens of Edgecombe, Halifax, Nash, Northampton, and Wilson counties in 1970 when they requested that the Division study their part of the state to find a suitable location for a state park. The survey was conducted, and one site -- the Medoc Mountain/Fishing Creek area -- was found to possess a suitable mix of natural, scenic, and recreational resources.

Land acquisition for the state park began in October, 1973, but the acquisition of the required land base has not yet been completed. Facility development at the park, based on the provisions of the 1975 master plan and what current conditions indicate is needed, falls far short of what was originally requested by the Region L Council of Governments and local citizens and what was intended by the Division and the State Parks Committee. Significant underfunding, in both capital improvement and operating budgets, has prevented the Division from providing the required visitor services, recreational facilities and opportunities, and environmental education programs the park and its natural resource base are capable of providing and sustaining.

The Division has developed a priority list of systemwide capital improvement needs totalling more than $168 million. It includes renovations of existing facilities and structures as well as new construction. The Division's Project Evaluation Program (PEP) indicates, based on the existing 18-year-old park master plan, that Medoc Mountain needs $8,787,800 in improvements.

Because the state park is within 10 miles of I-95, one of the most heavily travelled public transportation corridors in the U.S., and because it lies halfway between the Northeast and Florida, it possesses perhaps the greatest potential of any park in the system to entice out-of-state travellers to stop in North Carolina for more than a tank of gas and a quick meal before resuming their high-speed excursion to other destinations. With the addition of the proper recreation facilities for canoeing, swimming, RV and tent camping, and hiking, this park could become the outdoor recreation mecca of northeastern North Carolina and southeastern

Virginia and a planned stopover for many vacationers travelling I-95 north and south.

Because of this unique situation, and with the proper development and marketing, Medoc Mountain State Park could be a catalyst for economic development in this economically depressed are of North Carolina. With this potential in mind, personnel from Carolina Power and Light Company (CP&L), through their Adopt State Parks program, visited the park on October 19, 1992, to evaluate it and decide what they and CP&L could do to help with this effort.

The CP&L team talked to park and Division staff, explored the park on foot and by canoe, and became excited by what they saw when they realized the park's potential. Mr. Malcolm Holmes, the project quality team leader for CP&L, volunteered the company's Economic Development Unit to help the Division plan for implementing the GMP recommendations. This CP&L group will also help the Division and local civic and community leaders apply for an economic development grant as well as recruit the support and backing of other local, state and federal officials and legislators.

In direct support of this GMP, the CP&L team recognized several park projects to which they could immediately provide support and assistance through the company's Expertise and Resource Assistance Support (ERAS) Program with state parks:

- Conduct a biological inventory and water quality survey of the watersheds of Little Fishing Creek and Bear Swamp Creek to determine the suitability and proper location of the park's swimming and fishing lake.

- Complete a natural resource inventory of the entire park in preparation for a possible environmental impact statement concerning park development.

- Provide design and engineering assistance to the Division to determine facility and structure needs, to support acquisition of park development funds, and to support individual projects by providing engineering expertise, materials, and construction assistance.

If we are to develop the outdoor recreation opportunities promised to the citizens when the initial land acquisition was completed 18 years ago, funding is needed. The Division and Medoc Mountain State Park are in a unique position to seek alternative sources of funding because of the park's location and potential, the prevailing economic conditions in Halifax County and Region L, the commitment of the local community, and the corporate support and leadership available to the Division from CP&L.

TRAIL SYSTEM NEEDS

There are five hiking trails totalling 8.7 miles in the park. They are:

Bluffs Loop - 2.7 miles
Discovery Loop - 1.2 miles
Stream Trail - 1.0 mile
Summit - 3.0 miles
Dam Site Trail - 1.0 mile

All these trails need maintenance. Maintenance needs are proposed as a capital improvement project in Chapter VII, project #7. Improvements needed include steps, signs, tread repair, and erosion control. A bridge is also needed to connect trails on each side of Little Fish Creek.

Currently there are approximately three miles of horse trails in the park. A parking area and primitive campsites are associated facilities. The trails are in good condition, primarily due to very light use. Three miles of trails for horses is insufficient, especially when all the users are pulling horse trailers into the facility. Fifteen or more miles of equestrian trails is optimal.

Given the current boundaries of the park and the topographical limitations, there are only approximately three to five miles of additional trail that could be constructed. This length would be lessened even further if facilities noted in the master plan were located in the area. In addition, many of the potential routes border on land currently owned and operated by hunting clubs, and therefore, locating equestrian trails on the park's perimeter would create public safety concerns.

Until such time as the park's land base is expanded so that adequate area can be provided for horse trails, no equestrian improvements should be made. The horse camp area shown on the 1975 Master Plan is needed for a group camping area.

Little Fishing Creek provides an excellent resource for canoeing in the park. The speed and depth of the stream make it ideal for family groups and inexperienced paddlers. With canoe access area improvements proposed in Chapter VII, increased and safer use of this resource can be made.

IX. LAND ACQUISITION NEEDS

LAND ACQUISITION STATUS

Medoc Mountain State Park contains 2,287 acres. It was included in the 1985 appropriation for state park land acquisition, but no land was acquired. Land acquisition objectives include providing suitable land for the development of planned facilities and improving access control (Figure IV-1).

FUTURE LAND ACQUISITION NEEDS

Completing the master plan for the park calls for the acquisition of 192 acres to provide suitable land for planned facilities and to improve access control within the park. Master-planned acquisition needs are still relevant. Approximately 70 additional acres are needed on the eastern side of the park to protect the park lake's watershed. And about 85 additional acres are needed west of SR 1322 to buffer the planned new main park entrance, provide buffer for new park facilities, and help resolve hunting problems. In its review of this General Management Plan, the Medoc Mountain Park Advisory Committee requested that the Division explore the possibility of procuring a 100-foot or wider buffer across the street from the proposed park entrance. This will be explored and addressed in the next GMP cycle.

SUMMARY TABLE

1985 size of the park	2,287 acres
1985 land program additions	0 acres
Current size of the park	2,287 acres
Master-planned needs	192 acres
Master-planned size of the park	2,479 acres
Additions to master-planned needs	155 acres
New total planned size of park	2,634 acres

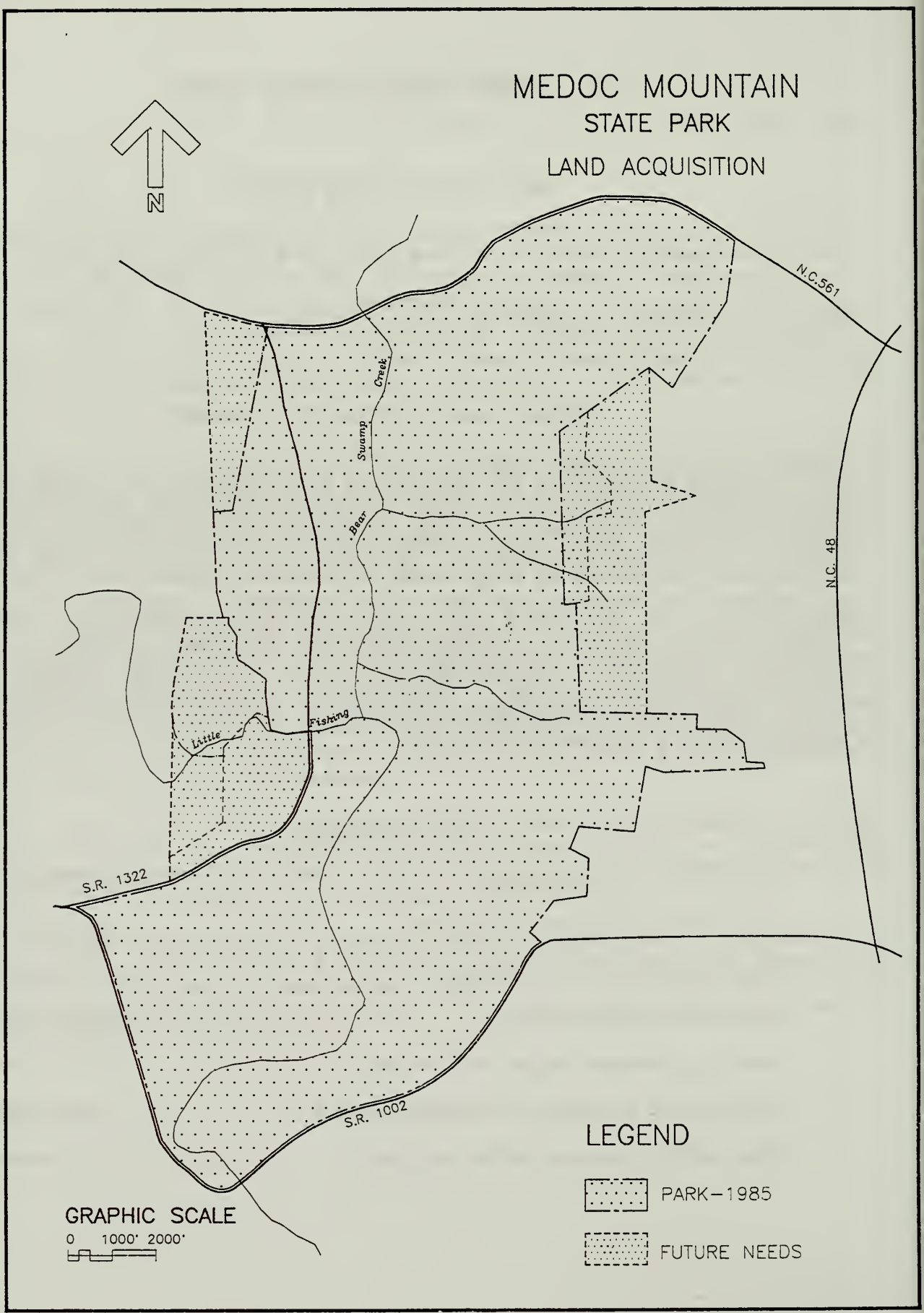


Figure IX-1. Land Acquisition

APPENDIX A

PARK PROFILE

MEDOC MOUNTAIN

PARK PROFILE

Location: Halifax County

Size: 2,287 acres

Reason for Establishment:

The park's location between the fault line of the Piedmont and the Coastal Plain is unique. The mountain itself is 325 feet high and is a biotite granite formation. The park contains unique biological, geological, recreational, and scenic resources.

Facilities:

Group camping (tent, restroom/shower)
Picnic area (32 tables, one shelter)
Residence (one house)
Trails (8 miles, hiking)

Existing Staff:

Permanent:	Seasonal:
1 Park Superintendent I	2 Park Attendants
1 Park Ranger II	2 General Utility Workers
1 Maintenance Mechanic	

Statistics:

	FY 1991
Visitation (Calendar 1992)	46,896
Operating Budget	$101,961
Revenue	$ 12,404

APPENDIX B

CAPITAL IMPROVEMENT REQUESTS

APPENDIX B

CAPITAL IMPROVEMENT REQUESTS

7/1/94 Capital Improvement Requests

Rank	Description	*Mean Score	Total Costs
1.	Visitor center, camping, maintenance		$1,486,700
2.	Tent & trailer campground, Phase I		597,405
3.	Foot bridge across Fishing Creek	651	44,900
4.	Tent & trailer campground	615	830,200
5.	Group camp dev., boat launch (land dependent)	595	644,700
6.	Picnic areas, access road, bridge, parking	585	2,025,100
7.	Lookout tower	578	79,300
8.	Miscellaneous building repairs	572	48,200
9.	Trail improvements	549	124,700
		TOTAL:	$5,882,205

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NCDPR – GMP Section - 0026